



FREDERICK J. SIMOONS

The first part of the paper discusses the importance of the research and the objectives of the study. It then proceeds to a literature review, followed by a description of the methodology used. The results of the study are presented in the next section, followed by a discussion of the findings and their implications. The paper concludes with a summary of the main points and suggestions for further research.

The research was conducted in a laboratory setting, using a series of experiments to measure the effects of the treatment. The subjects were recruited from a local university and were given a detailed explanation of the procedures before participating. The data collected was analyzed using statistical software, and the results were compared to those of the control group.

The findings of the study indicate that the treatment had a significant effect on the outcome variable. This result is consistent with the hypothesis and provides support for the proposed mechanism of action. The implications of these findings are discussed in the context of the existing literature, and suggestions for further research are provided.

FARMERS OF INDIA

*VOLUME I*

PUNJAB, HIMACHAL PRADESH  
JAMMU & KASHMIR



the 1990s, the number of people with a mental health problem has increased by 50% (Mental Health Foundation, 2000). The prevalence of mental health problems has increased in the general population, and the incidence of mental health problems has increased in the prison population (Mental Health Foundation, 2000).

There is a growing awareness of the need to address the mental health needs of prisoners. The Department of Health (2000) has published a strategy for mental health services, which includes a commitment to improve the mental health of prisoners. The Department of Health (2000) has also published a strategy for mental health services, which includes a commitment to improve the mental health of prisoners.

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*A typical view of the countryside in Himachal Pradesh*

# FARMERS OF INDIA

*VOLUME I*

PUNJAB, HIMACHAL PRADESH  
JAMMU & KASHMIR

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PUBLISHED BY

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

NEW DELHI

FIRST PRINTED OCTOBER, 1959

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New Delhi*

Published by Prakash Krishen for the Indian Council of Agricultural Research, New Delhi, and printed  
by Pyarelal Sah at the Times of India Press, Bombay, India.

## FOREWORD

India is a large country. An area of thirteen million square miles, three thousand miles of sea coast, soils ranging from marshy clays to rocks, altitudes varying from sea level to 29,000 ft., snow wastes intermingling with forests, pastures, cultivated lands and deserts, six-hundred thousand villages, forty million people, an endless variety of life between the snow-bound mountains and the dark tropical forests—these are just a few details in the grand perspective of this sub-continent. To the outsider, baffled by the heterogeneity of its races and their languages, beliefs and traditions, the country means little more than a geographical unit. To its own people it is a vast complex world whose organic unity is taken for granted. But, whether one tries to describe India in terms of its geography and natural resources, or explains it historically, the picture remains incomplete. Only a comprehensive view of the wide canvas of Indian life can lead to a proper understanding of the country and its people.

From the Himalayas to Kanyakumari, and from Rajasthan to the North East Frontier Agency, there is a running continuity of culture, the Indian Culture. It derives its identity and strength from a common history and the traditions built through the ages. Despite the proliferation of customs and beliefs, and the multiplicity of races and tribes, this common culture has endured for centuries and is still a living force. Deep below all the visible differences is an organic unity which holds together all the people in the country. Thus, the Punjabi and the Malayalee, the Andhra and the Kannadiga, the Bihari and the Bengali are all one in their basic emotions and urges. They live under different climes, dress differently, eat differently, but possess a common heritage. The more one studies the existing diversity, the more is one excited to find a latent identity behind it. All superficial distinctions disappear, and different tribes and races appear as branches of one big family. This creates a vision of unity, a feeling that the teeming millions form one people, one nation. We talk of the need for emotional integration of the people, and yet do little to bring about a realisation of the fact that an organic integration already exists.

The cultural unity of the Indian people springs largely from the agricultural character of the country. Even today, when industrialisation is progressing rapidly and large scale migration is taking place from rural areas to cities and towns, 82 per cent. of the population lives in villages and is dependent on land. The plough is still the symbol of the life of this great mass of humanity. Since time immemorial, agriculture has been a kind of religion in the country. In fact, the peasantry, irrespective of its racial and caste sub-divisions, practises only this religion. The gods that are worshipped and the rituals with which they are honoured belong to the

## FOREWORD

soil, and are more or less the same all over the country. To understand India, one must, therefore, study its village life.

The new series of publications on Farmers of India, sponsored by the Indian Council of Agricultural Research, fulfils a great need. It aims at telling the story of the sons of the soil, of their character, community life and economic condition. The account is realistic and illuminated by a profound understanding of rural life in different States as shaped by history, geography, climate and religion. No essential detail has been omitted—topography, soils, climate, vegetation, crops, agricultural practices, farming communities, village organization, folklore, etc., are all included in the panorama of life described. Because of the inner unity of the treatment and the intensely human touch given to it, the whole account throbs with life and vitality. The inclusion of a large number of pictures and maps adds further to its charm. I congratulate Dr. M. S. Randhawa, Vice-President, Indian Council of Agricultural Research for conceiving and executing this project, and hope that the series 'Farmers of India' would serve to promote love and unity in the country and better understanding of it in other parts of the world.

New Delhi  
August 20, 1959

PUNJABRAO DESHMUKH  
MINISTER FOR AGRICULTURE  
GOVERNMENT OF INDIA

## PREFACE

Since the scheme of community development was inaugurated by Shri Jawaharlal Nehru, Prime Minister of India, in October, 1953, a good deal of interest has been aroused in this country as well as abroad about village India. People want to know about the farmers of different States of India, the environment in which they live, their soils, crops, villages and homes. What are the farm practices adopted by the agriculturists in different States? What do they eat and how do they amuse themselves? As one travels in a railway train from Chandigarh in the north to Trivandrum in the south, and from Bombay in the west to Shillong in the east, one sees the farmers in the different States of India ploughing their fields, harvesting their crops, and winnowing their grain. From the pine clad mountains of the Himalayas in the north to the coconut groves in the south, one sees such a diversity of climatic and soil conditions as well as ethnic composition of the rural population which is baffling indeed. For a long time the need of a book which could give information about the climate, soils, crops, the farming communities, their villages and homes and their culture was badly felt. At the meeting of the Advisory Board of the Indian Council of Agricultural Research held in December, 1955, I suggested that the Council should undertake to produce a series of books on the farmers of different States of India. India is a vast country with such diverse conditions that there is little understanding of the agricultural problems of various States, even among people who are entrusted with the administration of agriculture and of laying down of policies for its development. The experience of most of the administrators who are concerned with agriculture is limited to the particular State in which they were born or had the opportunity to work. It requires at least five years of intensive touring, study and observation to develop an All-India view of agriculture. The need of a series of books which could promote better understanding of the problems of the farmers of various States was readily recognised and it was decided to bring out a series of books on the 'Farmers of India'.

This volume which is the first of the series deals with the States of Punjab, Himachal Pradesh, and Jammu and Kashmir. The account of the Punjab is largely based on the observations which I made and recorded while working as Director-General of Rehabilitation and Development Commissioner. This was a type of work which provided me unique opportunity of seeing a very large number of villages from Lahaul and Kulu in the Himalayas down to the sand dunes of Hissar. Apart from my own observations, full use has been made of material from the District Gazetteers which contain objective observations of the British administrators of the past. The chapters on Himachal Pradesh have largely been compiled from material provided

by Dr. L. S. Negi, Director of Agriculture, Himachal Pradesh. The chapters on Jammu and Kashmir have been compiled by Shri Prem Nath from a study of all the available literature on this area, as well as from the notes provided by Shri G. M. Butt, Director of Agriculture of the State. In this connection special mention is to be made of standard works like 'Ancient Geography of Kashmir' by M. A. Stein, 'The Valley of Kashmir' by Walter Lawrence, 'The Jammu and Kashmir Territories' by Frederick Drew, 'This is Kashmir' by Pearce Gervis, and 'Magic Ladakh' by Major Gompertz which have been drawn upon liberally for completing the account of the farmers of this State.

It may be mentioned that the Indian Council of Agricultural Research took interest earlier also in the farmers of the different States of India. It was in 1941 that Dr. W. Burns, Agricultural Commissioner brought out a book entitled 'Sons of the Soil'. Dr. Burns himself contributed an article on 'The Maratha Cultivator', and the Directors of Agriculture contributed material on the farmers of their respective States. As a pioneer effort, it was commendable indeed, though it lacked unity of treatment. Moreover, the farmers were described in isolation from their environment, the rocks and mountains, the soils, the natural vegetation which surrounds their habitations, and their crops. One can only appreciate the ebony-like frames of the farmers of Tamilnad, Mysore and Kerala against the background of the coconut palms, and paddy fields under a tropical Sun. How handsome they appear in their natural surroundings! The hill-men of Ladakh, Lahaul, Spiti, Kulu, Kangra, Garhwal and Kumaon appear charming in their mountains. The hardy peasants of the Punjab with their wheatish complexion harmonize with the brown soil which they cultivate, and the dark Marathas seem to be the natural product of the black cotton soil of Central India and Deccan.

My travels in the different States of India in connection with the meetings of the Central Commodity Committees and inspections of Research Institutes provided a unique opportunity for observing the farmers of the different States of India, their villages, homes, crops, and cattle. I also got a first-hand experience of the climate in India, and was surprised that while in the month of January people shiver in North India, electric fans continue to whirl in Kerala and Tamilnad.

There is such diversity in climate, soils, crops and people in the Indian sub-continent which is unmatched by any other country in the world and to generalize about Indian agriculture is fatal indeed. When some people call the Indian farmers as conservative, backward or indifferent, probably the observation is based on conditions prevailing in some particular State. There are some States in India which are comparatively much more advanced in agriculture as compared with others such as Bombay, Madras, Punjab and Andhra. Not only the Departments of Agriculture in these States are better organised and have contributed to their advancement,

at the same time credit also largely goes to the peasantry. It is hard to match the skill of the Sikh Jat farmer from Jullundur district in extensive cultivation particularly of wheat crop where skill and stamina is required. For diversified agriculture, the unlimited patience and intelligence of the Gounders of Coimbatore district in Madras State is unrivalled. On small patches of land which are irrigated by small wells fitted with electricity, they raise precious crops of bananas, sugarcane, betel-vine and paddy. The Kammas of Guntur district in Andhra Pradesh are skilful farmers with rich experience of cultivation of commercial crops like tobacco and turmeric. The line sowing of crops and use of fertilizers in Guntur are visible indices of progressive agriculture. The Patels of Kaira district of Gujerat are also enterprising farmers who have developed a system of underground irrigation with the aid of cement pipes to economise water in the sandy soil of Kaira. Apart from this their Co-operative Milk Scheme, the running of which requires high business acumen is in itself an index of their progressive nature. In fact, farmers of the different States of India have probably much more to learn from each other than from those of other countries with entirely different climatic, social and economic conditions.

The photographs which serve as illustrations to the text are an essential and vital part of this book. One need hardly say, that no picture in words however vivid can convey as much as a good photograph. In illustrating books on agriculture including this series on 'Farmers of India', I had the unique privilege of utilizing the services of a talented photographer Hari Krishan Gorkha. He is essentially the photographer of the great outdoors, and is extremely sensitive to the beauty of the landscape, crops and the people. His steadiness is such that he can take panoramas without any gadget. These panoramas illustrate the landscape of the different States in a most graphic manner. Apart from eye for the beauty of landscape, it is his sympathy for the common people who live in the villages of India that is responsible for some eloquent studies of the farmer types of different States. In these photographs we see them as living human beings with feelings and emotions working in their familiar environment.

Photographing unknown women is a hazardous venture anywhere, and much more so in India. While the women in the Himalayas and Kerala raise no objection if their men folk are not nearby, in the Punjab it may be a real invitation for at least a grievous injury. The first question they ask is as to whether the photographer had not a mother or sister of his own to photograph. In this task, the women social education organisers under the Community Projects and National Extension Service Schemes provided very useful assistance. When they explained that the photographs were required as illustrations for books for the interpretation of rural culture and with no evil purpose, the response was always encouraging. Village school

girls also participated with considerable zeal. In any case, our experience was far more encouraging as compared with that of Sir George Gurney who explaining his first venture in photographing thus writes in the introduction to his book entitled 'Peasants of Bihar'.

"The difficulties experienced by the writer in taking some of these pictures were great. The most ludicrous reports spread through the city concerning his work. The camera of course was looked upon as a fearful engine of destruction, and sometimes half an hour has been wasted in feeble diplomacy to persuade an old lady to allow the lens to be pointed at her. Under these circumstances photographs had almost always to be taken by the instantaneous process, which, however certain it may be in the hands of the professional, frequently disappoints the mere amateur. The last photograph the writer took—that of a native house—was spoilt because the grandmother of the family refused to allow any of the children to appear in the picture, her reason being that the Government was building the bridge across the Gandak and wanted children to bury under its foundations. Just, however, as the plate was exposed, one of the little boys determined to immortalize himself, and leaped in front of the lens to the dismay of the female members of his family. He had his wish in appearing in the picture, but he was so near the lens that he covered half of it with his shoulders. On other occasions the writer was believed to be collecting carts and boats for the Egyptian war, or to be counting the wells in the country, because he knew a famine was approaching, and so on *ad infinitum*".

There has been a remarkable advance in photography since then. The modern cameras and films are so fast that before a person realizes that he is being photographed and starts protesting, his photograph had already been taken. This reminds me of an incident near Cheruthurthy in Kerala in the month of January, 1958, while we were on our way to Trichur after seeing the crop of Sea Island Cotton at Patambil. An attractive Moplah woman was walking on the road carrying a huge basket. We stopped the car, Gorkha followed her, and before she could realize what had happened, he had already taken two snaps. When she saw her passage blocked by a handsome young man, she was heard mildly protesting in Malayalam, "What are you doing to me?" She gave a charming photograph, one of the prettiest in the gallery of women collected by Gorkha. How many photographs were taken in this manner, it is hard to tell. But there is little doubt that Gorkha has been able to convey the grace and unsophisticated charm of the women of the villages of India successfully in his photographs, which serve as illustrations to this book.

I am fully conscious of the short-comings of a work of this nature. Statistical information on crops and their production particularly relating to Himachal Pradesh and Jammu & Kashmir is largely lacking. There are also difficulties in an objective appraisal of the character of the different farming communities as on account of spread of education and other factors,

## P R E F A C E

people have become unduly sensitive to criticism, and they would like only their good points to be mentioned and their defects to be ignored. The limitation imposed by this factor to a large extent detracts from the value of the observations made. However, this is what could not be helped and I hope in subsequent editions these short-comings would perhaps largely be overcome. Nevertheless, it is better to make a start and provide whatever material is available rather than waiting for perfection. I have every hope that the books under this series would be read with interest by all people who are interested in Indian agriculture and the farmers of India.

New Delhi  
September 15, 1959

M. S. RANDHAWA  
VICE-PRESIDENT  
INDIAN COUNCIL OF AGRICULTURAL RESEARCH

Of all occupations from which gain is secured, there is none better than agriculture, nothing more productive, nothing sweeter, nothing more worthy of a free man.

*Cicero, de Officiis, Bk. I, Sec. 42*

# CONTENTS

PAGE

## SECTION III. JAMMU AND KASHMIR

CHAPTER XXIII. JAMMU AND KASHMIR .. .. .	197
Area. Location. Population. Physical Divisions. Outer Hills. Middle Mountains. Kashmir Valley. Ladakh. Baltistan. Dardistan.	
CHAPTER XXIV. CLIMATE .. .. .	203
Temperature. Rainfall. Thunderstorms.	
CHAPTER XXV. GEOLOGY AND SOILS .. .. .	205
Various Geological Systems. Soil Classes.	
CHAPTER XXVI. CROPS AND AGRICULTURAL PRACTICES ..	209
Irrigation. Rice. Maize. Millets. Amaranth. Buck-wheat. Pulses. Cotton. Wheat and Barley. Saffron. Floating Fields.	
CHAPTER XXVII. HORTICULTURE .. .. .	221
Mulberry. Apricot. Cherry. Peach. Raspberry. Apple. Pear. Walnut. Almonds.	
CHAPTER XXVIII. FARMING COMMUNITIES .. .. .	225
Dogras. Chibhalis. Dards. People of the Valley. Pandits. Sikhs. Sheikhs. Saiyads. Mughals. Pathans. Dums. Galawans. Chaupans. Bands. Hanjis. Watahs. Nangars. Gujars. Inhabitants of North-east Mountains. Ladakhis. Champas. Baltis. Languages and Dialects.	
CHAPTER XXIX. VILLAGES AND FARMERS HOUSES .. ..	253
Jammu. Poonch. Dardistan. Baltistan. The Valley. Ladakh.	
CHAPTER XXX. FOLKLORE .. .. .	261
Folk-dances. Hafiza Dance. Bacha Nagma. Wattal Dumhal. Rouf Dance. Hikar Dance. Bhangra Dance of Jammu. Masked Dances of Ladakh.	
GLOSSARY .. .. .	266
APPENDIX .. .. .	275
BIBLIOGRAPHY .. .. .	295
INDEX .. .. .	299

# LIST OF ILLUSTRATIONS

	PAGE
80. The picturesque village of Chini with snow-covered peaks in the background.. .. .	185
81. Spinning wool is a popular pastime with the women of Himachal Pradesh .. .. .	186
82. Typical jewellery worn by Himachal women in Simla Hills ..	187
83. Folk-dancers of Simla Hills, Himachal Pradesh .. ..	188
84. A group of Nati dancers .. .. .	188
85. Map of Jammu and Kashmir showing administrative divisions	196
86. Kashmiri farmers threshing paddy .. .. .	213
87. A view of paddy fields during the harvest season in Kashmir Valley .. .. .	214
88. An old Kashmiri couple .. .. .	214
89. Kashmiri children .. .. .	215
90. A farmer ploughing his field near Srinagar .. .. .	216
91. A group of Dogra folk-dancers .. .. .	225
92. A Dogra woman with her children .. .. .	226
93. Women carrying manure in a Dogra village .. .. .	227
94. Two Dogra youths .. .. .	228
95. A Kashmiri family taking tea .. .. .	233
96. A fisherman of the Valley .. .. .	234
97. A Kashmiri woman pounding rice .. .. .	235
98. A Muslim woman of the Valley in her traditional dress ..	236
99. A young woman of Bakarwal (Chaupan) community .. ..	237
100. A Hanji family relaxing after the day's work .. .. .	238
101. A village on Gulmarg Road .. .. .	239
102. A Kashmiri mother .. .. .	240
103. Lamas of Ladakh .. .. .	247
104. A group of Ladakhi women .. .. .	247
105. Masked dancers of Ladakh .. .. .	248
106. Houses in a Jammu village .. .. .	255
107. A typical village of the Valley .. .. .	256
108. Multi-storeyed houses in a prosperous village.. ..	257
109. A Hindu farmer's house .. .. .	258

SECTION III

JAMMU AND KASHMIR

# MAP OF JAMMU & KASHMIR

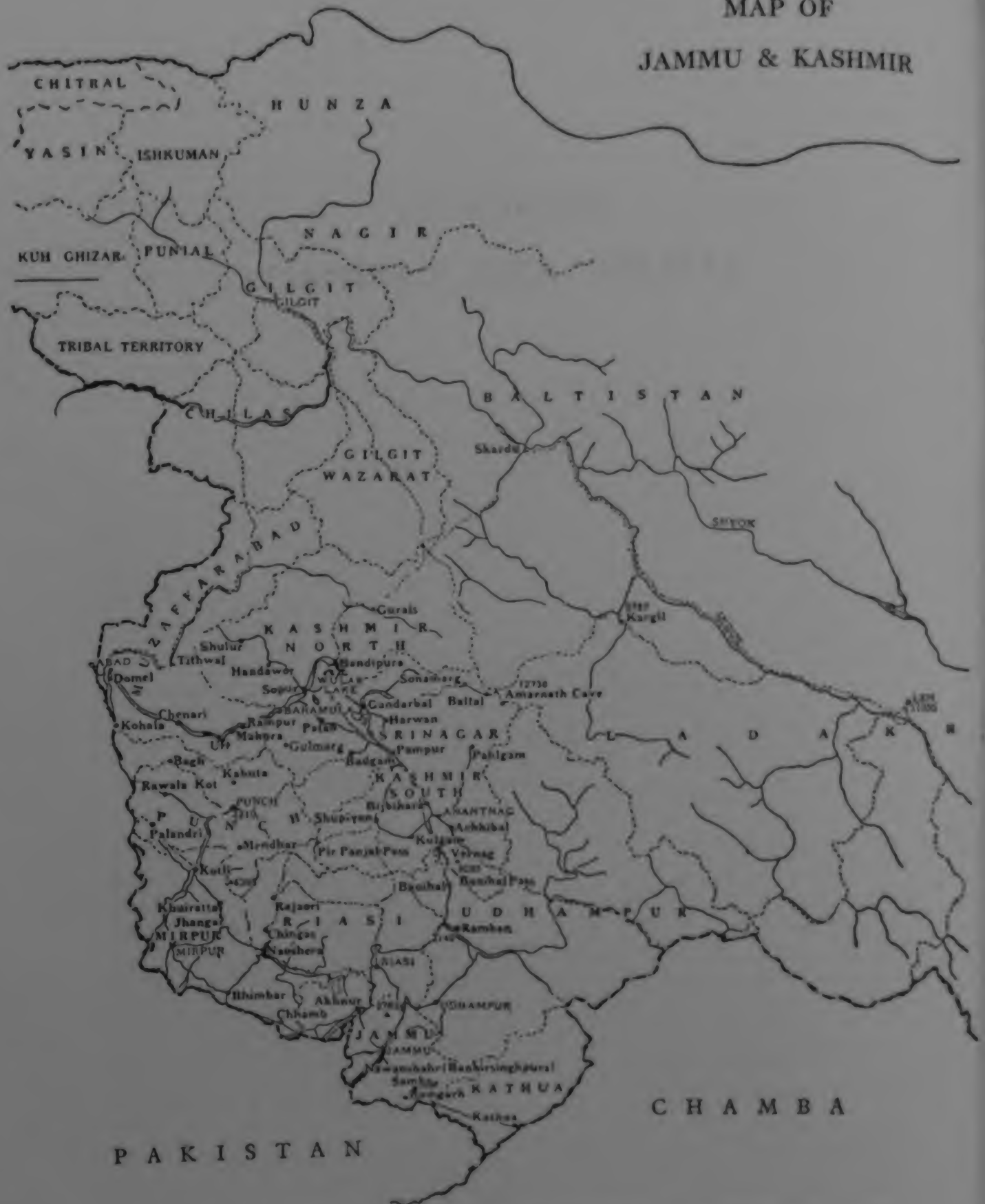


FIG. 85. Map of Jammu and Kashmir showing administrative divisions

## CHAPTER XXIII

# JAMMU AND KASHMIR

THE State of Jammu and Kashmir with an area of nearly 86,000 sq. miles extends from  $32^{\circ} 17'$  to  $36^{\circ} 58'N.$  and from  $73^{\circ} 26'$  to  $80^{\circ} 30'E.$  It is situated to the eastward of the Indus and westward of the Ravi. Separated from the Punjab frontier by just a fringe of level land, the country rises like a citadel of many storeys. Crossing the plinth of low hilly land in which is situated Jammu, the home of the Chibs and the Dogras, the traveller climbs the Pir Panjal range to reach the Valley of Kashmir. Crossing the steeper ranges of the Himalayas he passes to Astor and Baltistan on the north and to Ladakh on the east. Far away to the north-west lies Gilgit shadowed by a wall of giant mountains which run east from the Kilik passes of the Hindu Kush leading to the Pamirs and the Chinese territory. Westwards, the mighty maze of the mountains and glaciers sprawls into the Afghan country.

The State has a population of 44 millions distributed over an area of 85,861 square miles. This gives an average density of only fifty-one persons per square mile. The Jammu sub-division is the most thickly populated, while the frontier areas in the north-east have very little of human habitation. The urban population is about one-tenth of the rural. The Muslims form the majority, being 77 per cent. of the total population. The Hindus who are the next in numerical importance (20 per cent.) are concentrated mostly in Jammu area. The Buddhists are confined largely to the eastern parts of Ladakh. The Sikhs and other communities are scattered all over the State.

Much has been written by European travellers about Kashmir since Bernier told the world of "Cachemire, the paradise of the Indies". However, no description can do full justice to the splendour with which Nature has invested it. In the words of the Kashmiris it is "an emerald set in pearls"—a land of lakes and streams and of perennial verdure and mighty mountains.

The State shows two broad physical divisions: the South-western through which flow the Jhelum, the Kishanganga and the Chenab, and the North-eastern which comprises the area drained by the Indus and its tributaries. The South-western Region may be divided into three parts: the belt of the Outer Hills, the Middle Mountains, and the Kashmir Valley. The North-eastern Region has three administrative divisions, namely, Ladakh or Little Tibet, Baltistan which is called Chera Bhotun by the Kashmiris, and Dardistan. The dividing line between the two regions is formed by the great central mountain range which runs from Nanga Parbat in a south-easterly direction for about 240 miles before it enters the territory of Lahaul.

A narrow strip of plain country, five to fifteen miles wide and cut up by numerous ravines, forms the boundary between the Punjab and Kashmir. It runs from the Ravi to the Jhelum, and towards the interior abuts on a region of broken ground and low hills which lie parallel to the general line of the Himalayan chain. These hills vary in height from 2,000 to 4,000 feet, and are largely composed of sandstone, being in fact a continuation of the Siwalik geological formation. They are sparsely covered with low scrub bushes, the *chir* (*Pinus longifolia*) gradually predominating as the inner hills are reached. Lying between them are a series of fairly well populated valleys or *duns*. Beyond the lower hills rise the spurs of a more mountainous area.

The zone of the Middle Mountains includes the range which forms the southern boundary of the Kashmir Valley, known as the Panjal range, and its continuation eastwards beyond the Chenab. This tract is about 180 miles long and varies in width from 25 to 35 miles. The portion lying between the Jhelum and the Chenab is formed by the mass of mountainous spurs running down from the high Panjal range which forms its northern limit. The Panjal itself, extending from Muzaffarabad on the Jhelum to near Kishtwar on the Chenab, is a massive mountain range, the highest central portion to which the name is truly supplied having a length of 80 miles with peaks rising to 14,000–15,000 feet. From the southern side a series of spurs branches out, which break the ground into an intricate mountain mass cut into by ravines or divided by narrow valleys.

The elevation of these middle mountains is sufficient, to give a thoroughly temperate character to the vegetation. Forests of Himalayan oak, pine, spruce, silver fir, and *deodar* occupy a great part of the mountain slopes; the rest, the more sunny parts, where forest trees do not flourish, is, except where rocks jut out, well covered with plants and flowers which resemble those of Central or Southern Europe. East of the Chenab river rises a somewhat similar mass of hills, forming the district of Bhadarwah, with peaks varying from 9,000 to 14,000 feet in height. These culminate in the high range which forms the Chamba and Ravi watershed in Chamba territory.

The third section of the south-western area bears a unique character in the Himalayas. It consists of an open valley of considerable extent, completely surrounded by mountains. The boundaries are formed on the north-east by the great central range which separates the Jhelum and Indus drainage, and on the south by the Panjal range. The eastern boundary is formed by a high spur of the main range, which branching off at about  $75^{\circ} 30' E.$  runs nearly due south, its peaks maintaining an elevation ranging from 12,000 to 14,000 feet. This minor range forms the watershed between the Jhelum and the Chenab, separating the Kashmir Valley from the Wardwan Valley. It eventually joins and blends with the Panjal range about 16 miles west of Kishtwar. On the north and west, the bounding ranges of the valley are more difficult to describe. A few miles west of the spot from

## JAMMU AND KASHMIR

which the eastern boundary spur branches near the Zoji La, another minor range is given off. This runs nearly due west for about 100 miles at an elevation ranging from 12,000 to 13,000 feet, with a width of 15 to 20 miles. It forms the watershed between the Jhelum on the south and its important tributary the Kishanganga on the north. After reaching  $74^{\circ} 15' E.$  the ridge gradually curves round to the south, until it reaches the Jhelum abreast of the western end of the Panjal range. The valley thus enclosed has a length, measured from ridge to ridge, of about 115 miles with a width, varying from 45 to 70 miles, and is drained throughout by the Jhelum with its various tributaries. The flat portion is much restricted, owing to the spurs given off by the great central range, which run down into the plain, forming the well-known Sind and Liddar valleys. On the southern side the spurs from the Panjal range project 10 to 16 miles into the plain.

The North-eastern Region is comprised between the great central chain on the south and the Karakoram range and its continuation on the north. It is drained by the Indus and its great tributaries, the Shyok, the Zaskar, the Suru, and the Gilgit rivers. The chief characteristic of this region, more especially of the eastern portion, is the great altitude of the valleys and plains. The junction of the Gilgit and Indus rivers is 4,300 feet above sea-level. Eighty miles farther east at the confluence of the Shyok and Indus, the level of the Indus is 7,700 feet; opposite Leh, 130 miles farther up the river, its height is 10,600 feet, while near the Kashmir-Tibet boundary in the Kokzhung district the river runs at the great height of 13,800 feet above sea-level.

Between the various streams which drain the country rise high mountain ranges, those in the central portions attaining an elevation of 16,000 to 20,000 feet, while the mighty flanking masses of the Karakoram culminate in the great peak Godwin Austen (28,265 feet). The difference of the level in the valleys between the eastern and western tracts has its natural effect on the scenery. In the east, as in the Rupshu district of Ladakh, the lowest ground is 13,500 feet above the sea while the mountains run very evenly to a height of 20,000 or 21,000 feet. The result is a series of long open valleys, bounded by comparatively low hills having very little of the characteristics of what is generally termed a mountainous country. To the west as the valleys deepen, while the bordering mountains keep at much the same elevation, the character of the country changes, and assumes the more familiar Himalayan character of massive ridges and spurs falling steeply into the deep valleys between.

The central chain commences in the west from the great mountain mass rising directly above the Indus, of which the culminating peak is the Nanga Parbat. From this point it runs in a south-easterly direction, forming the watershed between the Indus and the Kishanganga. It quickly falls to an altitude of 14,000 to 15,000 feet, at which it continues for 50 to 60 miles. It is crossed by several passes, the best known of which are the Burzil on

the road from Kashmir to Gilgit, and the Zoji La of 11,300 feet, over which runs the road from Srinagar to Dras and Leh. From the Zoji La the mountains rapidly rise in elevation, the peaks attaining an altitude of 18,000 to 20,000 feet, culminating in the Nun Kun peaks which rise to a height of over 23,000 feet. Owing to their altitude these mountains are under perpetual snow, and glaciers form in every valley. The range keeps this character for a distance of 150 miles to the Bara Lacha Pass where it passes into Spiti.

The Karakoram range is of a far more complicated character. Broadly speaking, it is a continuation of the Hindu Kush, and forms the watershed between the Central Asia drainage and the streams flowing into the Indian Ocean. From its main ridge lofty spurs extend into Kashmir, separating the various tributaries of the Indus, the result being a stupendous mountain mass, 220 miles long with a width on the south side of the watershed of 30 to 60 miles. The peaks average from 21,000 to 23,000 feet, culminating on the west in the well-known Rakaposhi mountain, north of Gilgit, over 25,500 feet high, and in the mighty group of peaks round the head of the Baltoro glacier dominated by the second highest mountain in the world, Godwin Austen. The head of every valley is the birthplace of a glacier. Many of these are of immense size, such as the Baltoro, the Biafo and the Hispar glaciers, the latter two forming an unbroken stretch of ice, over 50 miles long. This great mountain barrier is broken through at one point by the Hunza stream, a tributary of the Gilgit river, the watershed at the head of which has a comparatively low elevation of about 15,500 feet. The next well-known pass lies 150 miles to the east, where the road from Leh to Yarkand leads over the Karakoram Pass at an altitude of about 18,300 feet.

A description of this mountainous region would be incomplete without a reference to the vast elevated plains of Lingzhithang, which lie at the extreme north-eastern limit of Kashmir territory. These plains are geographically allied to the great Tibetan plateau. The ground-level is from 16,000 to 17,000 feet above the sea, and such rain as falls drains into a series of salt lakes. Of vegetation there is little or none, the country being a desolate expanse of earth and rock. The northern border of this plateau is formed by the Kuenlun mountains, the northern face of which slopes down into the plains of Khotan.

The territories of Ladakh, Baltistan and Dardistan cover an area of 63,560 sq. miles, or roughly twice the area of the Jammu and Kashmir sub-divisions. They are very thinly populated, the total number of inhabitants being only about three lakhs.

Ladakh contains a great portion of what is the biggest massif of mountains in the world—the Karakorams. They form the northern boundary of the district, with passes lying at elevations of 17,000 to 18,000 feet. To the south of the Karakorams is the Ladakh range whose peaks tower 3,500 feet

above the summit of Mont Blanc. South of this range and cut off from its main chain by the Indus, lies the Zaskar range. These three mountain chains contain two great valleys, the Indus and the Shyok, the true floor of Ladakh. The territory comprises six sub-divisions: Rukshuk, Zaskar, Lubra, Leh, Dras, and Kargil.

Ladakh is for the most part a desert of bare crags and granite dust with vast arid tablelands of high elevation. There is hardly any place in the region which is less than 8,000 feet above the sea. The height of the mountains ranges from 17,000 to 21,000 feet, and there are some peaks which are over 25,000 feet. There is practically no rainfall and temperature variations are great. Whatever vegetation is found, centres round the streams and *nullahs*. The chief crops are wheat, barley, buck-wheat, peas, rapeseed, beans, turnips, and lucerne. *Grim*, a variety of loose grained barley, is intensively cultivated and flourishes in regions as high as 14,000 feet above sea-level. In the warmer parts, apples and apricots are grown.

Baltistan or Skardu extends on both sides of the Indus for 150 miles. It is bounded on the north by the Karakoram mountains, on the east by Ladakh, on the south by the Himalayas, and on the west by Dardistan. Its sub-divisions are Kharmang, Khaplu, Shigar, Skardu, and Rondu. Very high mountains intermingle with valleys, and several glaciers are found of which the Baltoro is the greatest in the world. Side by side several hot springs also exist.

The climate of Baltistan is like that of Kashmir. The fruits are very sweet, especially grapes, melons and apricots. However, the cultivable land is very little, and the people migrate every year in search of labour to other States.

Dardistan is bounded on the north by the Karakorams, the Hindu Kush, and Pamir; on the east by Baltistan; on the west by Yagistan; and on the south by the Kashmir Valley. Its sub-divisions are Astor, Bunji, Chilas, Gilgit, Hunza, Nagar, Punial, Yasin, and Chitral. The Indus flows through 150 miles of the area draining the water of the northern and southern mountains. The rainfall is slight. In the northern tracts nearly all the fruits of Kashmir are to be found, especially in Hunza and Nagar where they are very sweet and delicious. The area from Astor to Gilgit is as hot as the Punjab. Little fields of corn are met with in the neighbourhood of villages. However, grass and timber are scarce. The chief agricultural products are wheat, barley and maize.

It is said of Maharaja Gulab Singh that when he surveyed the valley of Kashmir after purchasing it from the British in 1846, he grumbled and remarked that one-third of the country was mountains, one-third water and the remainder alienated to privileged persons. The number of lakes—mountain tarns—in the State is very large indeed. Of these the Wular, the Dal and the Manasbal are known all over the world for their exquisite beauty. The Wular is the largest fresh-water lake in India, and perhaps in Asia. Five

miles broad and about thirteen miles long, it lies to the north-east of the Valley surrounded by lofty mountains. The Dal, four miles long and one-and-half miles broad, is in the eastern suburbs of Srinagar. The Manasbal is the deepest lake in the country. All these are remnants of a great lake which filled the Valley in the Pleistocene.

The lakes found in the upper valleys around the Haramukh mountain are Gangabal, Lool Gool and Sarabal. They are at an elevation of nearly 12,000 feet above sea-level. To the south-east of the Pir Panjal range lies the lake of Konsar Nag (12,800 ft.) which is fed by glaciers. On the Amarnath mountain is the Tarsar lake which feeds the Harwan situated on the slopes of the Mahadev mountain, about two miles away from the Moghul garden Shalimar in Srinagar. Besides these, there are numerous tarns in the mountain ranges around the Gurais Valley, Ladakh and Karakoram.

The country is also rich in springs, many of which are thermal. They are useful auxiliaries to the mountain streams for irrigation, and are sometimes the sole source of water, as in the case of Achabal, Verinag and Kokarnag on the south, and Arpal on the east. Islamabad or Anantnag 'the place of countless springs' sends out numerous streams. One of these springs, the Maliknag, is sulphurous and its water is highly prized for garden cultivation.

## CHAPTER XXIV

### CLIMATE

THE climatic conditions in Kashmir show great diversity due to marked differences in the altitude of various regions, the elevation varying from 1,200 ft. at Jammu to over 25,000 ft. on the highest mountain peaks. Besides, factors, such as, situation (i.e., whether a valley or a mountain peak), direction of winds, nature of precipitation, radiation from the ground, and the period and depth of snow accumulation, which vary from place to place, also have great influence on climate.

The temperature in the valleys which are more or less completely shut in by mountains is considerably lower than that at similar elevations on the crest of the Outer Himalayas. At higher elevations, where snow accumulation is heavy, winter is very severe. Where rapid radiation from the ground occurs, such as at Dras and Sonamarg, the temperature even in sunny days in winter does not rise much above the freezing point.

The mean daily temperature is the lowest in January and highest in June or July. At Srinagar, the average for January is about 33°F., and for July, which is the hottest month, about 74°F. The range of mean temperature between the maximum and the minimum is 25° to 75°F. at Skardu, 3° to 65°F. at Dras, 18° to 62°F. at Leh, and 37° to 85°F. at Gilgit. The most noteworthy features of the annual variation are the very rapid increase of temperature in March or April at the end of the winter, and an equally rapid decrease in October when the skies clear after the south-west monsoon. The diurnal range is least at Gilgit (20°F.) and Srinagar (22°F.) on the mean of the year, and greatest at Dras (31°F.) and Leh (26°F.).

The precipitation is confined to two well-defined periods, namely, winter season from December to April, and the south-west monsoon period from June to September. The rainfall in October and November is small in quantity, and November is usually the driest month of the year. The winter precipitation is chiefly due to storms which advance from Persia and Baluchistan across northern India. These disturbances occasionally cause very stormy weather in the State, with violent winds and heavy snow-fall. The snow-fall is heavy on the Pir Panjal range, the maximum being in January or February. In the Valley and the mountain ranges to the north and east this is the chief precipitation of the year, and is very heavy on the first line of the permanent snow, but decreases rapidly eastwards to the Karakoram range. The largest amount is received at Srinagar, Dras and Anantnag in January. In the Karakoram region and the Tibetan plateau the winter fall is much later (i.e., from March to May) than that on the outer ranges of the Himalayas, the maximum being received in

## FARMERS OF INDIA

April. The average snow-fall at Srinagar in an ordinary winter is about 8 feet.

In April and May thunderstorms occur occasionally in the Valley and the surrounding hills, giving light to moderate showers of rain which are of considerable value to the cultivators. From June to November heavy rain falls on the Pir Panjal range, and in Jammu, chiefly in the months of July, August and September. The rainfall at Jammu and Poonch is comparable with that of the submontane districts of the Punjab. It is more moderate in amount in the Valley, which receives a total of about 10 inches, as compared with 36 inches at Poonch and 27 inches at Domel. The precipitation is very light to the east of the first line of the snows bordering the Valley on the east, and is about 2 inches in total amount at Gilgit, Skardu, Kargil and Leh. Thus the south-west monsoon is the predominant feature in Jammu and Kishtwar, while in Ladakh, Gilgit and the higher ranges the cold-season precipitation is more important.

## GEOLOGY AND SOILS

'KASHMIR', the old Sanskrit name by which the land has been known since time immemorial, is believed by some to be connected with the memory of Kashyapa who, according to the traditional account, caused a mighty lake which covered the country to be dried up. Dr. Stein refers to this legend in his famous book 'The Ancient Geography of Kashmir' as follows:

"The general configuration of the country may be held to account for the ancient legend which represents Kashmir to have been originally a lake. This legend is mentioned by Kalhana in the Introduction to his Chronicle and is related at great length in the Nilamata.

"According to this earliest traditional account the lake called Satisara, 'the lake of Sati (Durga)', occupied the place of Kashmir from the beginning of the Kalpa. In the period of the seventh Manu the demon Jalodbhave (waterborn) who resided in this lake, caused great distress to all neighbouring countries by his devastations. The Muni Kasyapa, the father of all Nagas, while engaged in a pilgrimage to the Tirthas in the north of India, heard of the cause of this distress from his son Nila, the king of the Kashmir Nagas. The sage thereupon promised to punish the evil-doer and proceeded to the seat of Brahma to implore his and other gods' help for the purpose. His prayer was granted. The whole host of gods by Brahma's command started for Satisara and took up their position on the lofty peaks of the Naubandhana Tirtha above the lake Kramasaras (Konsar Nag). The demon who was invincible in his own element, refused to come forth from the lake. Vishnu thereupon called upon his brother Balabhadra to drain the lake. This he effected by piercing the mountains with his weapon, the ploughshare. When the lake had become dry Jalodbhave was attacked by Vishnu and after a fierce combat slain with the god's war-disc.

"Kasyapa then settled the land of Kashmir which had thus been produced. The gods took up their abodes in it as well as the Nagas, while the various goddesses adorned the land in the shape of rivers.

"The legend of the desiccation of the lake is also alluded to by Hiuen Tsiang, though in another Buddhistic form. Its main features, as related in the Nilamata, live to this day in popular tradition. They are also reproduced in all Muhammadan abstracts of the Chronicle. From Haidar Malik's *Tarikh* the legend became known to Dr. Bernier who prefaces with it his description of the '*Paradis terrestre des Indes*'. It has since found its way into almost every European account of Kashmir."

Geologists corroborate the story in so far as it relates to the existence of a vast lake in the Valley. However, they assign to the lake a date somewhere in the comparatively late geological times.

## FARMERS OF INDIA

There is abundant evidence that igneous or volcanic agencies were at one time actively at work, as is proved by the outpouring of vast quantities of volcanic rocks; but these are not known to have erupted since the Eocene period. Subterraneous thermal action is, however, indicated by the prevalence of numerous hot springs.

The following Table of geological systems in descending order is given by Lydekker for the whole State:

<i>Geological System</i>	<i>Period</i>
Alluvial system :	
Low-level alluvia, &c.	Prehistoric
High-level alluvia, glacial, lacustrine, and <i>karewa</i> series	Pleistocene
Tertiary system :	
Siwalik series { Outer Inner	} Pliocene
Sirmur series { Murree group Sabathu group Indus Tertiaries }	Miocene
Zaskar system :	
Chikkim series	Cretaceous
Supra-Kuling series	Jura and Trias
Kuling series	Carboniferous
Panjal system :	
Not generally subdivided	{ Silurian Cambrian
Metamorphic system :	
Metamorphosed Panjals, &c.	Palaeozoic and
Central gneiss	Archaean

Under the first of these systems, Lydekker has discussed the interesting question whether Kashmir was once covered by a great lake. In this discussion the *karewas* figure prominently, and according to him the only explanation of the upper *karewas* is that Kashmir must have been occupied in the remote past by a vast lake of which the existing lakes are remnants.

The geological formations consist of rocks of various ages. Crystalline metamorphic rocks, gneisses and schists occupy very large areas to the north of the Outer Himalayas. Fossiliferous Palaeozoic rocks occupy an elongated ellipse-shaped patch of the country north of the alluvial part of the Valley,

## GEOLOGY AND SOILS

stretching from the Lidar to the south-east end of the Kashmir sedimentary basin where it merges into the Spiti basin. Rocks of Cambrian and Ordovician ages are met with in many parts of the State. In composition these rocks are thin-bedded argillaceous, siliceous and micaceous slates. The rocks composing the Lower Carboniferous of Kashmir are mainly thin-bedded flaggy limestones of grey colour. Overlying the upper beds of these *Syringothyris* limestones there are beds of unfossiliferous quartzites and shales.

Rocks of the Punjab Volcanic series in Kashmir are divisible into two broad sections: the lower — a thick series of pyroclastic slates, conglomerates and agglomeratic products, some thousand feet in thickness, and the upper — the 'Punjab traps' an equally thick series bedded and estitic traps generally, overlying the agglomerates. The series cover an enormous surface area of the country, being only next in area and distribution to the gneissic rocks. The 'Punjab traps' are directly and conformably overlain in several parts of Kashmir by a series of beds of siliceous and carbonaceous shales.

The Triassic rocks in Kashmir consist mainly of limestones which are often dolomitic in composition. The outer Siwaliks consist lithologically either of very coarse conglomerates, the boulder conglomerate, or massive beds of brown and red clays.

### SOILS

No detailed survey of the soils of Kashmir has been made. The available data are summarised below.

Locality	Nature	N	Available $K_2O$	Available $P_2O_5$	$CO_2$	Loss on ignition	pH	CaO	T. S. S.
Taparkerewa Tehsil Bera	Saffron soil	105	0.044	0.022	0.138	..	..	..	..
Srinagar	Garden soil	0.12	0.023	0.016	0.23	..	..	1.48	..
Kishtroor	Saffron soil	0.049	0.17	0.70	..	5.07	7.3	6.97	0.086
Shilvat		0.404	0.224	2.556	..	..	..	..	..

Hoon (1938) has carried out an investigation of soil profiles, under *deodar*, blue pine, silver fir and *chir* in the hill forests of the main Valley and Batote Range in Jammu. The blue pine soils of the Valley appear to belong to the podsol group. The *deodar* soil of Batote belongs to the brown earth group. Hoon suggests that the podsoles of Kashmir Valley are more allied to the Kulu Coniferous soils of the podsol group than to the recognised type of podsol.

## FARMERS OF INDIA

The Valley proper possesses a large area of alluvial soil, which may be divided into two classes: the new alluvium, found in the bays and deltas of the mountain rivers; and the old alluvium, lying above the banks of the Jhelum and extending as far as the *karewas*. The first is of great fertility, and every year is renewed and enriched by silt from the mountain streams. Up to the present, in spite of the lax system of forest conservancy, the silt of the mountain streams is rich and of dark colour; but the Sind river brings down an increasing amount of sandy deposit, which is partly due to the reckless felling of trees.

The Kashmiris recognize four classes of soil. These are known as *grutu*, *bahil*, *sekil* and *dazanlad*. *Grutu* soil contains a large proportion of clay. It holds water, and in years of scanty rainfall is the safest land for rice. But if the rains be heavy, the soil cakes and the out-turn of the crop is poor. *Bahil* is rich loam of great natural strength; and there is always a danger that by over-manuring the soil may become too strong and the plant run to blade. *Sekil* is light loam with a sandy sub-soil; and if there be sufficient irrigation and good rains, the out-turn of rice is always large. *Dazanlad* soil is chiefly found in low-lying ground near the swamps, but it sometimes occurs in the higher villages also. Special precautions are taken to run off irrigation water when the rice plant shows signs of a too rapid growth; and if these are taken in time, the out-turn in *dazanlad* land is sometimes very heavy. A peculiarity of this soil is that the irrigation water turns red in colour. Near the banks of the Jhelum, and in the vicinity of the Wular Lake, is found a rich, peaty soil (*nambal*), which in years of fair rainfall yields enormous crops of rapeseed and maize. This will not produce rice and requires no manure. It is, however, the custom to burn standing weeds and the stubble of the previous year's crop before ploughing.

The *karewas*, which form so striking a feature in the scenery of the country, are for the most part of *grutu* soil, with varieties distinguished by colour. The most fertile is the dark blackish soil known as *surhzamin*, the red *grutu* is the next best, while yellow soil is considered the worst of all. Other classes are recognized, and there are many local names.

## CHAPTER XXVI

### CROPS AND AGRICULTURAL PRACTICES

AGRICULTURE in Kashmir presents a highly variegated pattern, as may well be expected in a country where the topography and climate change abruptly every twenty miles. It is not possible to describe it in detail here, but a broad idea of the cultivation practices followed and the crops grown in the more homogeneous areas may be had from the account given below.

In Jammu, the lower tracts yield all the usual crops of the Punjab, while at higher elevations saffron, buck-wheat and mountain-barley are grown. Mango and *sheesham* are found in abundance in the warmer parts, and apple, pear, *deodar*, and *chinar* are common in the hills. In the hot moist tracts irrigated from the Ravi and the Ujh, cultivation is done mostly by men from the adjoining hills who descend to the plains for short periods. North of this area lie the thirsty low-lands and the *kandi* tract which produce only small quantities of wheat, barley, maize and millets. Beyond the *kandi* hills is a narrow belt of fertile valleys traversed by numerous streams. In this area excellent crops are raised wherever the soil is deep. But on the hill slopes cultivation is scanty and precarious.

Above the first limestone range is situated a country of wide valleys and high hills, consisting of Basohli, Ramnagar, Udhampur, Nawshera, and part of Reasi tehsils. It has a temperate climate, and the supply of water from perennial streams is constant. Being nearer the Himalayan range, rainfall is usually heavy and fairly regular. The crops are much the same as those grown in the plains, but *bajra* gives place to maize. Grazing facilities are good, and the tract is frequented by *gujars*, goatherds and shepherds.

The higher uplands, including Bhadrawarh, Kishtwar, Ramban, part of Reasi and Rampur Rajouri, have a really cold climate and in the winter snow-fall is not uncommon. The cultivators are a different class from those in the plains and the lower hills. The climate approximates to that of the Kashmir Valley, and so does the pattern of cultivation. Irrigation is common and the rainfall heavy. The specialities are saffron in Kishtwar, and poppy in Doda, Kishtwar and Bhadrawarh. Grazing lands are plentiful and *Gujars* numerous. Early snow-fall and cold winds from the mountains affect the crops in the parts adjoining the Himalayan range and not infrequently delay their ripening.

#### IRRIGATION

Agriculture in Kashmir Valley depends practically entirely on irrigation, which is both easy and abundant in normal years. The snows at higher

elevations feed the various mountain streams which flow into the Jhelum. From both sides of the river the country rises in bold terraces, and the water passes quickly from one village to another. At convenient points on the mountain streams, temporary weirs or projecting spurs are constructed, and the water is taken off in the main channels, which pass into a net work of small ducts and eventually empty themselves into the Jhelum or into the large swamps which lie along its banks. Lower down, where the streams flow gently, dams are erected. All villages which depend for their irrigation on a certain weir are obliged to assist in its construction and repair. The weir consists of wooden stakes and stones, with grasses and willow branches twisted in between the stakes, the best grass for this purpose being the *fikal*. The channel often has to be taken over ravines and around the edges of the *karewa* cliffs, and irrigation then becomes very difficult. The system of distribution is rough and simple; but it has the advantage that quarrels between villages rarely arise, and disputes between cultivators of the same village are unknown. Besides the irrigation derived from the mountain streams, an important auxiliary supply is obtained from numerous springs. Some of these afford excellent irrigation, but they have two drawbacks. Spring water is always cold and it does not carry with it the fertilizing silt brought down by the mountain streams, but bears a scum which is considered bad for rice.

The Kashmiris are fortunate in possessing ample manure for their fields, and are not compelled to use the greater part of the cattle-dung for fuel. The rule is that all dung, whether of sheep, cattle, or horses, dropped in the winter when the animals are in the houses is reserved for agriculture, while the summer dung is dried and after being mixed with *chinar* leaves and willow twigs is kept for fuel. When the flocks begin to move towards the mountains, the sheep are folded on the fields, and this provides rich manure for the summer crops. Turf clods, taken from the sides of water courses, are considered to be even more effective than farmyard manure for improving the fertility of rice fields. These are rich in silt, and a dressing of these is believed to strengthen a field for three years, whereas farmyard manure must be applied every year. The strongest farmyard manure is that of poultry, and this is reserved for onions. The next best is the manure of sheep, which is always kept for the rice nurseries. Next comes cattle dung, and last of all horse dung. The value of night-soil is thoroughly understood. Near Srinagar and the larger villages, the only manure used is poudrette, or night-soil mixed with dust and decomposed by the action of the sun.

The implements used by the farmers are few and simple. The plough is of necessity light as the cattle are small. It is made of various woods, the mulberry, the ash, and the apple being considered the best. The plough-share is tipped with iron. For clod-breaking a wooden mallet is used and the work is done in gangs. Sometimes a log of wood is drawn over the furrows by bullocks, the driver standing on the log. But as a rule, the frost,

the snow, the abundant water and the *khushaba* (a weeding process) suffice for the disintegration of clods. For maize and cotton, a small hand hoe is used to extract weeds and to loosen the soil. Pestle and mortar are employed for husking rice and pounding maize. The mortar is made of a hollowed-out bole of wood, and the pestle is of light hardwood.

Agricultural operations are so timed that they fall within a certain period, considered auspicious, between the *nauroz* or the spring day and the *mezan* or commencement of autumn. The rice fields are hard and stiff in March; and if, as is sometimes the case, no snow has fallen, it is difficult work for the plough bullocks, thin and poor after the long winter, to break up the soil. If rain does not fall, a special watering must be given before ploughing commences. At times ploughing has to be done while the soil is wet, and in that case the out-turn is always poorer than the yield from fields where the soil is ploughed in dry condition. All the litter of the village and the farm-yard manure are carried to the fields by women and ploughed in or heaped in a place through which the irrigation duct passes so that the manure may get mixed with water and distributed evenly. In April, turf clods are cut from the banks of streams and irrigation channels, and broadcast over the wet fields. When four ploughings have been given and the clods broken with mallets, the soil is watered and sowing commenced. The rice seed, which has been carefully selected at threshing time and has been stored away in grass bags, is again examined and tested by winnowing. It is then put back into the grass bags and immersed in water until germination takes place. Sometimes the seed is placed in earthen vessels through which water is passed. In the higher villages it is convenient to sow earlier than in the lower villages, as the cold season comes on quicker and it is essential to harvest the crop before snow falls. Ploughing for maize and the autumn millets is not done so carefully as for rice; only two or three operations are considered sufficient. Sometimes, maize fields are irrigated after the sowings, but no manure is put in as a rule. Cotton alone receives manure in the form of ashes mixed with the seed.

In June and July, barley and wheat are cut and threshed. The ears are trodden out by cattle or sometimes beaten by sticks, and when there is no wind a blanket is flapped to winnow the grain. Anything is good enough for the spring crops, which are regarded by the Kashmiris as a kind of lottery in which they generally lose their stakes. At the same time comes the real labour of rice weeding, the *khushaba*. It involves putting the rice plants in their right places, and pressing the soft mud gently around the green seedling. No novice can do the work, as only an expert can detect the counterfeit grasses which pretend to be rice. The operation is best performed by hand, but it may be done by the feet, or by cattle splashing up and down the wet fields of mud (*gupan nind*). Sometimes when the rice is two feet high the whole crop is ploughed up (*sele*). When rice has bloomed and the grain has begun to form, the water is run off the fields, and a short time before

harvest a final watering is given which swells the ears. Often, while the rice is standing, rapeseed is cast into the water. No ploughing is given, and a crop of rape is thus easily obtained. Before the harvesting of autumn crops commences, about the first half of September, rain may fall and it is very beneficial. It improves the rice crop, and it also enables the cultivator to plough and sow for the spring crops. Such rain is known as *kambar ka*, and there is great rejoicing when these timely showers occur. Before September, if rain has fallen, a large area of land will be ploughed up and sown with rapeseed; and both this and the early sowings for barley and wheat are of importance, as they come at a time when the cultivator and his cattle have some leisure, for then the *khushaba* is over and harvest has not commenced. There are no carts in the Valley, save in the flat plain around the Wular Lake, where a primitive trolly is used; and as the Kashmiris will not use plough-bullocks for carriage, the sheaves of rice and of other crops are slowly and laboriously carried by men to the threshing floor. When the ricks are thoroughly dry, threshing commences. Gripping a bundle of rice plants in his two hands, the cultivator beats them over a log of wood and detaches the ears from the stalk. The straw is carefully stored, as it is considered good fodder and the best thatching straw of all.

When the weather is favourable, from October to December, the cultivator is busy ploughing 'dry' land for wheat and barley. But by the end of December, ploughing must cease, and the farmers occupy themselves with threshing and husking the rice and other crops, and with domestic work, such as tending sheep and cattle and weaving blankets.

The ploughings for wheat and barley are very few—three at the most for wheat, for barley two, are considered sufficient. No labour is spent in weeding or manuring, and the standing crops of wheat and barley would shock a Punjabi farmer. The fields are choked with weeds, and it is wonderful that there should be any crop at all. Two years of barley or wheat cultivation would ruin any land, and the farmers have the sense to follow a spring crop by an autumn crop. Some day more attention may be paid to their barley and wheat, but two facts prevent either of these crops being largely produced in the Valley. The rainfall is scanty and very uncertain, and if irrigation were attempted the water in the spring time would prove too cold for plant growth.

The principal crops are rice, maize, cotton, saffron, tobacco, hops, millets, amaranth, buck-wheat, pulses, and sesamum in the autumn; and wheat, barley, poppy, rape, flax, peas, and beans in the spring.

**Rice.** It is the staple diet of Kashmiris; its cultivation is, therefore, given the most careful attention. The soils being generally porous, water has to be kept running over the fields right from the sowing of the crop to almost the harvest time, for if once the land becomes hard and caked, the stalks are pinched and the plants suffer heavy damage. Weeds are also a serious menace as their growth is very rapid. If they get ahead of the young



Fig. 86. Kashmiri farmers threshing paddy



Fig. 87. A view of paddy fields th



Fig. 88. An old Kashmiri couple



ring the harvest season in Kashmir valley



Fig. 89. Kashmiri children



Fig. 90. A farmer ploughing his field near Srinagar

plants it becomes extremely difficult to eradicate them or to repair the injury.

There are two systems of cultivation. Under the first the rice is sown broadcast; under the second it is first sown in nursery and then planted out. Two *khushabas* are sufficient for the latter, while four *khushabas* are essential in broadcast sowings. Where the soil is good and irrigation fairly abundant, the cultivator generally prefers the broadcast system, though in certain circumstances the nursery method becomes necessary. The soil is prepared in two ways. The one is known as *tao*, the other as *kenalu*. An old proverb says that for rice cultivation the land should be absolutely wet or absolutely dry. In *tao* cultivation the soil is ploughed dry; and when the clods are perfectly free from moisture the seed is sown after giving the first irrigation. In *kenalu* cultivation, the soil is ploughed wet. However, as a rule the *tao* system is preferred, for it gives better results and also involves less labour.

The number of rice varieties in Kashmir is very large, but they may roughly be divided into two classes, the white and the red. The white varieties are held in greater esteem, the best among them being the *basmati* and the *kanyun*. These germinate quickly and also ripen more rapidly than any other variety. But the plants are very delicate and cannot stand exposure to cold winds; consequently the crop yield is small. Therefore, from the cultivator's point of view the white rices are less popular than the red ones, which are more hardy, give larger out-turn, can be grown at higher elevations, and are less liable to damage from wild animals.

For a good rice harvest the following conditions are considered necessary: heavy snows on the mountains in the winter to fill the streams in the summer; good rains in March and at the beginning of April; clear, bright, warm days and cool nights in May, June, July and August, with an occasional shower and fine cold weather in September.

**Maize.** In importance, maize is second only to rice. Enormous crops are raised in the black peaty land bordering the banks of the Jhelum, as also in the high tracts occupied by the Gujar graziers.

As a rule, the fields receive no manure, the prevailing system of harvesting rendering application of manures unnecessary. A large part of the stalks is left on the fields, which rot away during the winter and are ploughed into the soil. Ordinarily two to three ploughings are given before sowing the seed. A month after sowing, when the plants are about a foot high, the fields are weeded, mostly by women, with the help of a small hand hoe. For a really good crop, fortnightly rains are required, but in the swamp lands the natural moisture of the soil proves adequate even when precipitation is delayed. No irrigation is given as a rule.

**Millet.** In years of scanty snow-fall, the rice lands are extensively sown with *kangni* or *shol* (*Setaria italica*) which is a valuable millet crop. The fields are carefully ploughed about four times, and the seed is sown in

April and May. Some weeding is done, but generally the crop is left undisturbed until it ripens in September.

Another important millet is *cheena* or *ping* (*Panicum miliaceum*) which is very like rice in appearance, but is grown on 'dry' land. The field is ploughed three times in June, and after sowing cattle are let in to tread down the soil. Weeding is done occasionally, but like *kangni*, the crop does not require much attention. It is harvested in September.

**Amaranth.** The *ganhar* or amaranth, with its gold, coral, and crimson stalks and flowers is an exceedingly beautiful crop. It is frequently sown in rows in the cotton fields or on the borders of maize plots. The sowing is done in May after two or three ploughings. No manure or irrigation is given, and with timely rains a large out-turn is harvested in September. The minute grain is first parched, then ground and eaten with milk or water. It is considered a heating food by the people, and Hindus eat it on their fast-days. The stalks are used by washermen, who extract an alkaline substance from the burnt ashes.

**Buck-wheat.** *Trumba* or buck-wheat (*Fagopyrum esculentum*) is a very useful plant as it can be sown late in almost any soil. When the cultivator sees no hope of water coming to his rice fields he at once gets busy sowing the *trumba*. There are two varieties. The sweet *trumba*, which serves as a substitute for rice and the bitter *trumba*, which in the higher villages is very often the only food grain grown. The unhusked grain is black in colour, and is either ground and made into bread or eaten as porridge.

**Pulses.** Pulses till lately were not very popular, only *mung* (*Phaseolus mungo*) having some importance. The land is ploughed three times and the seed sown in May. No irrigation is given. The other pulses are *mah* (*Phaseolus radiatus*) and *mothi* (*P. aconitifolius*).

**Oilseeds.** The principal oilseed is rape, of which there are three varieties. The first is *tilgoglu*, which is sown in September and October on 'dry' lands, and especially on the soft reclaimed swamp lands. As a rule there is no weeding, except where the wild hemp is very vigorous. Timely rains from February to May are required, and the crop is harvested in May and June. The second variety is known as *taruz* or *sarshaf*, and is sown in the spring. It ripens at the same time as the *tilgoglu*. The third kind is known as *sandiji*, and is sown in the standing rice crop when the last watering is being given. It yields a small crop, but as no labour is expended on it the cultivator regards it quite useful.

Linseed is cultivated all over the Valley, but the best fields are on the lower slopes of the mountains. The land is ploughed twice, and a third ploughing is given when the seed is sown in April. The crop is harvested towards the end of July. Timely rains are required in May or the plant withers. The crop is said to exhaust the land, but little manure is given and the fields are not weeded.

**Til** (*Sesamum indicum*), which is a very common crop, is sown in April after ploughing the land four times. The plant is very delicate and is injured by cold winds. The crop ripens shortly after rice. Blankets are spread under the plants at harvest-time to collect the seeds which fall out of the pods easily. The average yield is about  $1\frac{1}{2}$  maunds per acre.

**Cotton.** Cotton is grown up to a certain elevation only. Its cultivation is concentrated mostly in the *karewas* and the low-lying rice lands. The soil is ploughed at least three times, after which the clods are pulverized with mallets. The seed is soaked in water and mixed with ashes before sowing, but the plant receives no manure. Sowing takes place at the end of April or in May.

**Wheat and Barley.** These are the major spring crops of the Valley. From the point of view of area, barley is more important of the two. However, little effort is expended on its cultivation, and the quality of grain is also poor. The seed is sown from October to December after one or two ploughings. The fields are seldom weeded or manured. It sometimes becomes difficult to distinguish the plants amid the mass of the *chirman* weed (*Ranunculus* sp.).

In the higher villages, at an elevation of 7,000 feet, a special variety, known as *grim* or Tibetan barley, is grown. It is an important food-staple in those high regions.

Wheat receives better treatment than barley, but two ploughings, with a third at seed time, are considered sufficient. The land is neither manured nor weeded, and as a rule no irrigation is given. The seed is sown in September and October, and the crop ripens in June. The common variety is a red wheat with a small hard grain.

**Saffron.** The vast plateaux of Pampur present an unforgettable sight in the months of October and November when the saffron fields are in flower. Used as a perfume, salve, medicine, culinary and confectionary delicacy, anointment in religious and social ceremonies, etc. saffron has enjoyed a high prestige since time immemorial. Kashmir is the largest producer of it in the world and her people proudly call it 'Kashmiraja'.

The cultivation of saffron is a difficult art. For seed purposes a particular aspect and sloping ground is required, and it takes three years before the bulbs can be planted in the small square plots where the crop is to be grown. The time for planting the bulbs is in July and August, and all that the cultivator has to do is to break up the soil surface gently a few times and to ensure proper drainage of the plot by digging a neat trench on all the four sides. The flowers appear about the middle of October. These are collected and dried in the sun. The stigma has a red orange tip which forms the *shahi zaffran* or the first quality saffron. The long white base of the stigma also provides saffron, but the product is of slightly inferior quality. The saffron collected from the tip and base of the flower in dry condition is known to the trade as *mongra*. After the *mongra* saffron is extracted, the

sundried flowers are beaten lightly with sticks and winnowed. Then the whole mass is thrown into water to separate the petals which do not sink. The petals are again dried and beaten. The process is repeated a number of times, but after each repetition the quality of the yield deteriorates. The saffron so collected is named *lachha*.

#### FLOATING FIELDS

Next to saffron cultivation in interest come the floating gardens of the Dal Lake, which resemble the 'china-mpas' of Old Mexico. The whole cultivation and vegetation of the lake is full of interest and of great importance to the people. The *radh* or floating gardens are made of long strips of the lake reed, with a breadth of about six feet. These strips can be towed from place to place, and are moored at the four corners by poles driven into the lake bed. When the *radh* is sufficiently strong to bear the weight of a man, heaps of weed and mud are extracted from the lake by poles, formed into cones, and placed at intervals on the *radh*. The cones are known as *pokar*. Each cone accommodates two seedlings of melons or tomatoes, or four seedlings of water-melons or cucumber. Everything that plant life requires is present. A rich soil and ample moisture, with the summer sun, help to produce vegetables in surprising abundance and of excellent quality. Not inferior to the floating gardens in fertility are the *demb* lands, which are formed along the sides and sometimes in the middle of the lake when the water is shallow. The cultivator selects his site and plants willows and sometimes poplars along its four sides. Inside these he casts boatloads of weed and mud until his land is above the flood-level, and year after year he adds a new dressing of the rich lake weed and mud. Around the *demb* plot run little water-channels from the lake, so that moisture is always present. On the *demb* a great variety of crops are raised. Rapeseed, maize, tobacco, melons and other *Cucurbitaceae*, potatoes, onions, radish, turnips, egg-plants, white beans, peaches, apricots and quinces flourish on this rich soil.

## HORTICULTURE

KASHMIR is a land of fruits and flowers. Perhaps no other country grows a greater variety or has better facilities for horticulture. The apple, pear, vine, mulberry, walnut, hazel, cherry, peach, apricot, raspberry, gooseberry, currant, plum and strawberry are found in abundance in most parts of the Valley.

When the first days of summer arrive, the mulberry trees are surrounded by villagers with their outspread blankets, and by cattle, ponies, and dogs, who all munch the sweet black or white fruit. There are grafted varieties, the best of which is *shahtut*, purple and juicy, and much esteemed as a preserve. With an eye to the winter the provident cultivator stores away the mulberries which he cannot eat, and they retain their sweetness long. The apricot ripens next, and they too are quickly eaten or stored away for the winter; but the Kashmiri looks on the apricot as intended to give oil rather than fruit. This fruit is also used by the silversmith for cleaning his metal, and by dyers as an astringent. The cherry is usually of the *Black Morella* variety, sour in taste, yet appreciated by the people; but in places the delicious Whiteheart an introduction from Europe *via* Arabia, Persia, and Afghanistan is cultivated. The wild plums are excellent, and the cultivated plums are often very fine. The peach that has extended its area from cultivation is small but refreshing, and a wild raspberry is as good and as delicate in flavour as the cultivated raspberry and the wild strawberry and black currant are excellent.

The most popular apple is the *Anbru* or *Ambri*, which has a large round red and white sweet fruit, ripening in October and keeping its condition for a long time. This is exported in large quantities, and it finds favour with the people of the country for its sweetness and handsome appearance. The *Mohi Ambri* is like the *Ambri*, but is more acid and redder. It is largely exported. The *Khuddu Sari* apple is said to have been introduced from Kabul. It is long in shape, and is juicy and rather, acid, ripening early and not keeping. But the best apple, so far as flavour goes, is the little *Trel*, which abounds in the neighbourhood of Sopur. There are three common kinds: the *Nabadi Trel*, which is rather yellow, the *Jambasi Trel*, which turns red; and the *Sill Trel*, which is rather larger than the *Nabadi* and *Jambasi*, and of a deep red colour. When ripe these little apples have the most delicious taste, half sour, half sweet. From this variety, when picked at the right time, excellent cider has been made. A superior variety of the *Trel* is the *Khatoni Trel*, which is larger but possesses all the flavour of the smaller kind. There are many other kinds, but the Kashmiri would give the palm to the *Dud*

*Ambri*, which is the sweetest and finest of the *Ambri*. Many of the wild apples, such as the *Tel shakr* and *Malmu*, are very refreshing. About the beginning of September the people pick the wild apples and the *trel* apples, and having cut them in half, dry them in the sun.

The pear is as yet of secondary importance, and does not form a large article of export. But several very good pears are cultivated, the best of which are the *Nak Satarwati*, which has a beautiful shape and a sweet juicy flesh, and the *Nak Gulabi*, which has a pretty red skin and is a very pleasant fruit. The Kashmiris, though they think it essential to peel an apple, never peel pears. They also hold that it is dangerous to eat pears in the winter. Cold in the head and the eyes is the result of such indulgence. The early pear is known as the *Gosh Bug* and is very refreshing, and the later fruit is called *Tang*. The wild pear is found all over the Valley.

The quinces, sour and sweet, are famous, and in the gardens of the Dal Lake splendid specimens of this fruit are to be seen. The tree is grown for its seed. Pomegranates are common, but are not of any special merit.

The walnut-tree is indigenous to the country, and is known by the vernacular name *vont dun* 'hard walnut', as under ordinary circumstances one is unable to break the shell. The fruit is useless, but the bark used to be a large export to the Punjab. The fruit of the cultivated tree is an important aid to the villagers. The tree is found all over the valley, from an elevation of about 5,500 feet to 7,500 feet. It is propagated from seed; and although grafting is not uncommon, the general idea seems to be that the three varieties—the *Kaghazi*, the *Burzal*, and the *Wantu*—reproduce themselves from seed. Hitherto walnuts have been grown for oil and not for eating, and the *wantu*, in spite of its thick hard shell, is the largest fruiter and gives the most oil. The *Burzal* stands half-way between the *Kaghazi* and the *Wantu*, and is like the ordinary walnut of England. Some of the trees reach an enormous size, and the finest specimens are to be found as one ascends the mountain valleys.

Large almond orchards are scattered over the valley, and many of the hill-sides might easily be planted with this hardy and profitable tree. It is a somewhat uncertain crop, but very little attention is paid to its cultivation and as a rule the almond orchards are unfenced. There are two kinds, the sweet and the bitter; the former is worth double the latter in the market.

## FARMING COMMUNITIES

It is now generally accepted that Kashmiris have descended from the Indo-Aryan stock. The Valley is believed to have been inhabited originally by tribes called Pishacha, Yaksha and Naga who were ultimately overcome and driven out by the Brahmans from other parts of India. We find in ancient records mention of several sects, such as Nishad, Khasha, Dard, Bhutta, Bhiksha, Damra, Tantrin, etc., who were a regular menace to the Brahman settlers for several centuries. Buddhism came into ascendancy in the 2nd Century B.C. Its tolerant spirit and missionary fervour made a great impression on the people and large numbers embraced it readily. In the 14th Century A.D. the Valley was overrun by Muslim invaders who made conversions *en masse* wherever they penetrated. In later times, Sikhism and Christianity had their victories. However, notwithstanding this diversity of religious faiths the true inhabitants of the Valley have preserved a fairly distinct character. As the Imperial Gazetteer puts it, "The Kashmiri is unchanged, in spite of the splendid Mughal, the brutal Afghan, and the bully Sikh. Warriors and statesmen came and went; but there was no egress, and no wish on the part of the Kashmiris in normal times to leave their home. The outside world was far, and from all accounts inferior to the pleasant valley, and at each of the gates of the valley were soldiers who demanded fees. So the Kashmiris lived their self-centred life, conceited, clever, and conservative."

Those who live in the stretch of land running from the north-west to the south-west beyond the ring of the mountains which surround the main Valley are the men of Jammu, Poonch, and Dardistan—or, broadly speaking, the Dogras, the Chibhalis and the Dards. They belong to fighting races, and in the past were attacking the Valley from time to time or helping the other invaders. They are fearless and trustworthy, and remain loyal to those to whom they offer their allegiance. Some of the finest troops in the old Indian Army were recruited from them.

Temperamentally the people of these regions differ very much from one another. Writing about this, Pearce Gervis observes:

"The man of Jammu will sometimes smile, the man of Gilgit seldom, for with him life has been hard; the land from which he comes yields grudgingly. On the other hand the man from Poonch, who comes from midway between the two, both in the position of his State and the productivity of his lands, in his early years seems to prefer soldiering to working upon the land, to which he returns after he has earned himself a small pension. In all they are generally men that you can always rely upon; provided you are

their friend they will stand by you, and come what may will never desert you in time of trouble. More particularly does this refer to the two northern states; never did the expression 'taken at face value' better apply. But they can be fanatical, these men, over their love affairs, and will desert and suffer anything to get those they have set their hearts upon, caste, creed and race meaning nothing; then, having got them, if young and attractive they will jealously guard them, if not, they will amazingly either ignore them or cast them aside after a few years or even months. It seems as though their desire is only to prove their ability to acquire and possess for a while, then interest goes. They are however men you can always trust with life and possessions, they will never rob a friend or master. If they hate, or if they discover that trust has been misplaced, then their hatred can be such that they will kill, that 'quality' being increasingly apparent as the land becomes the more barren and they can ill afford to carry those who are not friends. And although over the years each have been subdued by invaders, those who came did not find the task an easy one, for although beaten, the vanquished remained men, holding their heads proudly erect; they do not cringe nor even fawn."

**Dogras.** The settlers in the hills bordering the Punjab—in any case those who have retained their Hindu faith—bear the name Dogra, and the country they inhabit is called Dugar. The origin of the name, as explained by Drew, is as follows: "Near Jammu are two holy lakes, Saroin Sar and Man Sar; from these the country round was called in Sanskrit Dvigartdesh, or the 'country of the two hollows'; from this came Dugar, and from that Dogra."

The Dogras are divided into castes broadly in the same way as are the Hindus of India generally: these are partly the remnants of race-distinctions, and partly the outcome of occupations which have become hereditary. The following list gives the names of some of the castes in the order of importance.

Brahman

Rajput      { Mians  
                  { Working Rajputs

Khatri

Thakar

Jat

Dhiyar, Megh and Dum

The Brahmans, of course, constitute the highest caste. To them here, as in other parts of India, is traditionally due from all other Hindus a spiritual subjection, and to those of them who are learned in the holy books it is actually given. They are now breaking through the confines of their hereditary occupation to join other more remunerative professions. We also find them tilling land in the Outer Hills, and in the villages north and north-west of Akhnur, they constitute a high proportion of the farming population.



FIG. 91. A group of Dogra folk-dancers



FIG. 92. A Dogra woman with her children



FIG. 93. Women carrying manure in a Dogra village



FIG. 94. Two Dogra youths

The caste next in social importance is that of the Rajputs. For many centuries past they have been the rulers of the country, and this has engendered a peculiar conceit in them. Particularly, the Mians have a great notion of their superiority over others.

They are not large men—we should take their average height to be about 5 ft. 4 in. They are slim in make with somewhat high shoulders, and legs not well formed but slightly bowed. They have no great muscular power, but are nevertheless active and untiring. Their complexion is of a comparatively light shade of brown, rather darker than the almond-husk, which may be taken to represent the colour of the women, who, being less exposed, have acquired that lighter tint which is counted as the very complexion of beauty.

The men have an intelligent face, small features, generally a slightly hooked nose, a well-shaped mouth and dark brown eyes. Their hair and beard are jet black; the hair is cut to form a curly fringe below the *pagri* or turban; the moustache is usually turned up eyewards.

In character the Rajputs are simple and childlike. If taken in the right way they are tractable, else they resent interference. If once fixed to a certain line of conduct, they would adhere to it obstinately. They stick closely to the prejudices they were brought up in, and are very particular about observing the caste regulations. In money matters many of the Rajputs (and, indeed, the Dogras generally) are avaricious and close-fisted.

The Rajputs have many sub-divisions, most of which sprang up as a result of the distribution of leading families in different principalities into which their hill country was formerly divided. Thus we have Jamwal, Balaoria, Jasrotia, etc., as the names of those attached to, or possibly remotely connected by blood with the ruling families of Jammu, Balawar, or Jasrota. However, they can be divided broadly into two main classes: the Mians and the working Rajputs. The former follow no trade, nor will they turn their hands to agriculture. For a Mian to put his hand to the plough would be a disgrace. Most of them have a bit of land, either free or nearly free of land-tax, which they get others to cultivate for them. Their dwellings are generally isolated, being located either at the edge of or within the forest or waste so that hunting, which is their favourite pastime, may be pursued with the maximum freedom. Their profession is generally what they call 'service', meaning either military or State service which does not involve manual work. They make good soldiers and are faithful to their master. Warmth of temper, quickness of action and absence of tact, rather than steadfastness and amiability, are their most conspicuous characteristics.

The Working Rajputs are those whose families have, at various periods, taken to agriculture and have thus come down one step of caste. As agriculturalists they do not succeed so well as the older cultivating castes do.

Next come the Thakars who are the chief cultivating caste in the hills. In character they resemble the Jats of the Punjab, but the two are not related.

**Chibhalis.** The Chibhalis are known after the name of their country, Chibhal, which lies between the Chinab and the Jehlum in the Outer Hills region. The word Chibhal is most probably derived from Chib which is the name of one of the Rajput tribes. The Chibhalis, Mohammedans now, are, in fact, of the same race as the Dogras, who have remained Hindu. Several of their tribes have the same names as certain castes in Dugar. Thus, some of the sub-divisions of the Hindu Rajputs like Chib, Jaral, Pal, etc., exist also among the Mohammedans. Besides the Rajputs, many Mohammedanised Jats and Mohammedan Thakars are also found.

Of their appearance Pearce Gervis writes: "Here in this country are to be seen the fair complexions, the blue and the hazel eyes, the brown or gold-tinted hair. The men are in the main handsome, they are not as hard-looking as those of Gilgit; among the youths especially there is a blending with the rather effeminate young men of the Valley, but they are essentially men, their stride is long. They are taller than the others of the State, though not powerfully built, and it is seldom that one sees a fat Poonchi Muslim. Generally, their faces are long, the complexion light-brown; the nose large, aquiline and well shaped; quite frequently the black hair is wavy. In all they are a good-looking race, and this applies to both men and women, who even in their old age retain their good looks, the men then growing beards, and the eyebrows seeming to extend forward. What is more noticeable is that unlike the peasants and farmers of the Kashmir Valley and Ladakh, they are not filthy." The hold of religion on them is not tight; the independence of their rugged character asserts itself in spite of their faith. Their women go unveiled unlike their sisters over the mountains in Baltistan who scamper off on seeing a stranger—they just continue with their work as though unaware of the presence of the intruder. The men are firm and dependable, friendly if their devotion is won but cruel if cheated. Of their wives they demand absolute fidelity. Lapses are not forgiven.

**Dards.** The people of Dardistan are mostly Mohammedans: of both Shia and Sunni sects in Gilgit, of only Shia sect in Nagar, of the Ali-Ilahi sect (believing that Ali is God) in Hunza, and Mulahis in the other parts. They are broad-shouldered, moderately stout-built, well-proportioned people very active and energetic and good at mountaineering. Their bearing is independent and bold; they will not endure to be put upon, but stand out for their rights, and stand up against oppression as long as possible. They are by no means soft-hearted; but they are not disobliging when approached in the right way. As a race, they are decidedly clever and, if not so ingenious as the people of the Valley, are both clear-headed and quick. Such qualities as these make them a people that one must eventually come to respect—a people who are bold and, though not caring much for human life, are not blood thirsty; a people who will meet one on even terms, without sycophancy or fear on the one hand or impertinent self-assertion on the other.

The dress of the Dards is woollen, except among those living in warmer tracts, who wear cotton clothes in summer if they can get them. The apparel consists of pyjamas, *choga* (or gown-coat), a waistband to confine this, and lastly, a cap and chaussure, both of peculiar construction. The cap is a bag of woollen cloth half a yard long, which is rolled up outwards at the edges until it gets to the size which would fit the head comfortably. For their feet they have strips and scraps of leather put under and over and round the foot, and a long thin strip wound round and round to keep all these in place.

There are five major sub-divisions of the Dards which may be called castes: (i) Roun; (ii) Shin; (iii) Yashkun; (iv) Kremin; and (v) Dum. The Yashkun are the most numerous of all the castes. In Gilgit and Astor they are the body of the people whose chief occupation is agriculture. It is probable that they and the Shin together made up the race (which we may call Dard) that invaded this country and took it from the earlier inhabitants. The Shin are the highest of the four castes. In some isolated places they make the majority or even constitute the whole of the community, but in Gilgit itself they are not so numerous as the Yashkun, nor are they so in Astor. They hold the cow in abhorrence, and look down upon it in much the same way as the ordinary Mohammedan do a pig. They will not drink cow's milk or eat or make butter from it, nor use cowdung as fuel. Some cattle they are obliged to keep for ploughing, but they have as little as possible to do with them thus, when the cow calves, they would put the calf to the udder by pushing it with a forked stick as they would not touch it with their hands.

#### PEOPLE OF THE VALLEY

The inhabitants of the Valley are an intelligent people, quick witted and good humoured. They are fond of the beauties of Nature and love singing. They accept their lot in a spirit of resignation, and attribute all misfortunes to bad luck.

Crime is almost unknown in the villages. Property is absolutely safe, and one seldom hears of a theft or murder. If there is a quarrel, the parties rarely go beyond hurling invectives at each other or knocking off a turban.

The Kashmiri can turn his hand to anything. He is an excellent cultivator when he is working for himself. He is an expert gardener and raises a good crop. He is also an excellent weaver and can make first-rate blankets. There are few middlemen in the villages, and he has to do most of his business himself. This has enabled him to develop a keen eye and deft hands, and he seldom makes a bad bargain. He is, however, conservative and would quote in support of his system of agriculture, and indeed in support of every act of his everyday life, some rhyming proverb or old saying. Like other artistic people, he is fond of exaggeration which is particularly noticeable in his dealings with officials and suits for land. In private life also he likes to exaggerate things. Everything which is unusual—be it

wet weather, heavy snow or a hot day—is described in superlative terms. In addressing a superior he would call him *haz* or saint; an equal would be addressed as *sa*, a corruption of *sahib*; an inferior is called *ba* or brother.

The farmer is at his best in his home life. He is kind to his wife and children, and one rarely hears of divorce or scandals. A woman who has behaved badly is a marked character in the village and public opinion is always against her. The husband would sometimes chastise his wife, and then talk boastfully of the necessity of maintaining discipline in the family. But as a matter of fact, the wife is an equal of the husband. She is a real helpmate and joint work and joint interests lead to the closest comradeship between man and wife.

The clothes of the villagers are simple and drab in appearance. There is little difference between the garb of a man and woman, as they both wear a long gown which is buttoned at the neck and descends to the feet. Weight is given to the bottom of the gown by a deep hem, and sometimes this is artificially weighted in order to exclude the air and to keep in the heat of the *kangari*. The *kangari* is a small earthen bowl held in a frame of wicker-work. In the winter, and even in the summer, hot embers are put into it, and it is slipped under the voluminous gown. Small children use the *kangari* day and night, and few of the people have escaped without burn-marks caused by carelessness at night. The ordinary head-dress of a cultivator when he is at work is a cotton skull cap, but on special occasions he dons a white turban. Leather shoes are worn by the well-to-do and by most people on holidays, but the ordinary covering of the foot in the Valley is the leather or straw sandal, known as *tsapli* and *pulahru*, and the wooden patten for wet weather. Every Kashmiri can make his own *pulahru* from a wisp of rice straw.

It is a generally accepted fact that up to about the beginning of the fourteenth century the population of the Valley was Hindu, and that about the middle and end of the century the mass of the people was converted to Islam, through the efforts of Shah-i-Hamadan and his followers and the violent bigotry and persecution of king Sikandar, The Iconoclast. It is said that the persecution of the Hindus was so keen that only eleven Hindu families remained in the Valley. Their descendants are known by the name of Malmas, as distinguished from the fugitives as well as from the Hindus of the Deccan, who came to Kashmir later on and are known as Banamas.

The Hindus in the Valley are, with a few exceptions, of the Brahman caste, and though tradition points to the fact that the Levite Brahmans were a powerful and numerous body, exerting great influence over the country and its rulers, there is frequent mention of the fighting class, and it is obvious that a large majority of the old Hindus must have been agricultural Jats of the Vaisya division. There are, however, no traces of the Jats now. But still there are Khatris in Srinagar, known as Boharas, who are cut off from



FIG. 95. A Kashmiri family taking tea



FIG. 96. A fisherman of the Valley



FIG. 97. A Kashmiri woman pounding rice



FIG. 98. A Muslim woman of the Valley in her traditional dress



FIG. 99. A young woman of Bakarwal ( Chaupan ) community

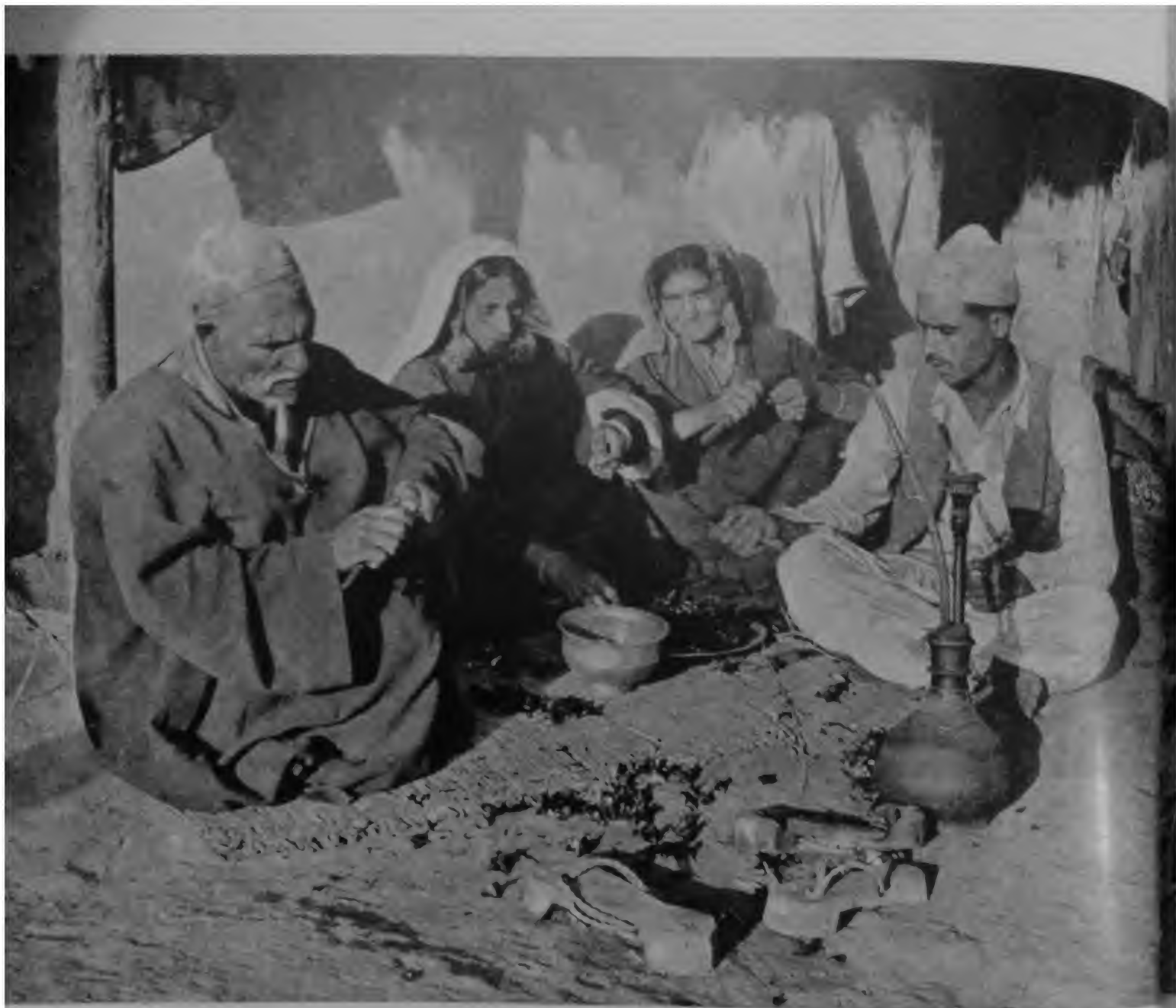


FIG. 100. A Hanji family relaxing after the day's work



FIG. 101. A village on Gulmarg Road



FIG. 102. A Kashmiri mother

communion with the Khatri of the Punjab. There are also certain Musalman tribes who trace their origin to Khatri ancestors.

A brief description of the major communities found in the Valley is given below.

**Pandits.** The Brahmans are commonly known as Pandits. They are divided into three classes: the astrologers (*Jotishi*), the priests (*Guru* or *Bachabat*), and the working class (*Karkun*). There are no inter-marriages between the priestly order and the other classes, mainly because the former is regarded as divine and, therefore, far removed from the run of ordinary men. But the *Jotishi* and *Karkun* Pandits inter-marry.

The *Jotishi* Pandits are learned in the *Shastras* and draw up almanacs in which prophecies are made about the coming events. The priestly class performs religious rites and ceremonies. However, the vast majority of the Pandits belong to the *Karkun* class and usually make their livelihood from State service. The *Karkun* regard the pen as their natural destiny; and though many have now taken to agriculture and many are engaged in business, they would generally prefer to spend their lives as clerks in some office.

The Pandits in the villages consider it no degradation to follow the plough and to carry manure; but the city Pandit is inclined to look down upon the Brahman agriculturist, and though he will take a wife from the villages he will not, if a man of any position, permit his daughter to marry into a village family.

The Pandits are a handsome race with fine, well-cut features, small hands and feet, and graceful figures. Their women are fair, graceful and distinctly good-looking. The children are very pretty.

**Sikhs.** The Sikhs in the Valley, who were originally Brahmans from the Punjab, can be distinguished easily from the native population by their long hair and beards, and also by their dress which does not include the effeminate gown usually worn by the Kashmiris. They are found chiefly in the Trahal pargana, Krihun, and Hamal. They are good farmers, but cannot compare with the Kashmiri Musalman in rice cultivation. They are men of slight build and not bad-looking.

**Sheikhs.** The majority of the Muslims in rural areas belong to the Sheikh sect; and though the Saiyads are also quite numerous, they as well as the Mughals and the Pathans are in a minority compared to the Sheikhs.

The Sheikhs have four important classes. The Pirzads, who are descendants of zealous converts to Islam, consider themselves equal to the Saiyads and inter-marry with them. The Babas, also descended from zealous converts, are now chiefly religious mendicants. The Rishis are the attendants at shrines established by the old ascetic recluses of Kashmir who were called *Rishi*, a corruption of the Sanskrit word *Rikhi*. The Mullahs, who form the priesthood, are divided into two classes: those learned in the law and variously designated as Maulvi, Kazi, Akhund, or Mufti and those who

have fallen in social position and are known as Mals. The latter wash and prepare the bodies of the dead for burial and dig graves, and they are not allowed to inter-marry with Mullahs or other Sheikhs.

**Saiyads.** The Saiyads may be divided into two sub-groups: those who follow the profession of religion (*Pir Muridi*) and those who have taken to agriculture and other pursuits. As compared with the Sheikh Musalmans they may be regarded as foreigners, though there is practically nothing in their appearance, manners or language which distinguishes them from other Kashmiri Musalmans. Some Saiyad families are much looked up to in the villages, but those who have taken to agriculture are practically on a level with the other villagers, and inter-marry with them.

Mir is the *Kram* name of the Saiyads. As long as a Saiyad retains the saintly profession, 'Mir' is prefixed to his name; when he takes to mundane pursuits the word becomes a suffix.

**Mughals.** The Mughals are not a numerous body in Kashmir, and have so much inter-married with the other Kashmiri Musalmans that all traces of descent has been lost. They came to Kashmir in the days of the early Musalman kings and also in Mughal times. Their *Krams* are Mir (a corruption of Mirza), Beg, Bandi, Bach, and Ashaye.

**Pathans.** The Pathans are more numerous than the Mughals, and are chiefly to be found in the Uttar Machipura tehsil, where Pathan colonies have been founded from time to time. The most interesting colony is that of the Kuki Kheyl Afridis of Dranghahama, who retain all the old Pathan customs, and still speak Pashtu. They wear a picturesque dress and carry swords and shields. They pride themselves on their bravery, and in the absence of a nobler foe engage the bear on foot with the sword, or spear him from their plucky little ponies.

**Dums.** The Dums are an important tribe, and till recent times have wielded great power in the villages. The village watchman was always a Dum, and in addition to his police functions he was entrusted by the State with the duty of looking after the crops.

**Galawans.** The Galawans, or horse-keepers, are considered by some to be the descendants of the Dums, and their dark complexion suggests that they are not of the same race to which the Kashmiri peasants generally belong. Others think that the Galawans are the descendants of the Tsak tribe.

**Chaupans.** The shepherds of Kashmir are known as Chaupans or Pohl, and though there is nothing in their physiognomy to distinguish them from the peasants of the Valley they form a separate race, inter-marrying sometimes with the Galawans. A Chaupan is a cheery active man with most characteristic whistle, and his healthy life in the high mountains makes him strong and robust. He has some knowledge of plants, and brings down medicinal herbs for the native doctors. The grazing lands are partitioned among the various families, and an intruder would very quickly prefer to

retire. In the winter and early spring the Chaupan lives in the villages, where he sometimes possesses a little arable land. The Chaupans and the Shirgujri or milk sellers often bear the *Kram* name Waggi.

**Bands.** The minstrels of Kashmir (Bhaggat or Band) can be recognized by their long black hair and stroller mien. They combine the profession of singing and acting with that of begging and are great wanderers, travelling down to other parts of India where they entertain Kashmiri audiences.

With the exception of the Akangam company, which is formed of Pandits, the Bands are all Musalmans. They are much wanted at marriage feasts; and at harvest time they move about in the country making a living from entertaining the cultivators. Their orchestra usually consists of four fiddles with a drum in the centre, or of clarionets and drums, but the company often contains twenty members or more. Their acting is excellent and their songs most pleasing. They are clever at improvisation and are fearless about its results.

**Hanjis.** The boatmen of Kashmir (Hanz or Hanji) are an important and prominent tribe. Nobody knows about their origin, but the profession is very ancient, and history affirms that Raja Parbat Sen introduced boatmen from Sangaldip. They were of the Vaisya caste, and even now the Hanjis of Kashmir, when blaming any of the crew for bad paddling, will say, 'You are a Sudra'. When questioned, they claim Noah as their ancestor.

The father is an autocrat in the family, and while his sons and daughters remain on his boat, all their earnings go to him. When a son wishes to marry, he must obtain his father's consent, which is often withheld, as there is little room for the young people in the Kashmiri boat.

There are many divisions in the Hanji tribe. There are the half amphibious paddlers of the Dal lake (Demb Hanz) who are really vegetable gardeners. They are also the boatmen of the Wular lake who gather the *singhara* nuts (Geri Hanz). These two sections hold their heads high among the other Hanjis. Next in respectability come the boatmen who live in the large barges known as *bahats* and *war*, in which huge cargoes of grain or wood are carried. The next class is that of the owners of the *dungas* or passenger boats *Nalla Mar*. Then there are the Gad Hanz, who are professional fishermen. Another small section of the tribe, known as Hak Hanz, make a livelihood by collecting driftwood in the rivers. The Dunga and Gad Hanz are famous for their invective powers and vocabulary of abuse, and when a quarrel arises between two families as happens often, one woman stands up on the prow of her boat and commences a torrent of sharp words to which a prompt rejoinder comes from her compeer in the other boat. The men remain seated listening with interest to the dialogue. If night sets in before the women are exhausted, they invert their rice baskets (*pai*), which signifies that the quarrel is not ended but laid aside till the following morning when the wordy warfare would be recommenced with fresh vigour.

The Hanjis are a hardy people, and though the occupants of the large barges have warm cabins for the winter, the Dunga Hanjis, in spite of their mud fireplace on which their food is cooked, find little protection against the cold. Half the tales about Kashmir and the Kashmiris can be traced to the imagination of the Hanji, who after the manner of the Irish car driver, tells travellers quaint stories of the Valley and its rulers. They are a clever people, and can do most things, from a big business in grain to cooking a visitor's dinner. Their favourite *Karms* are Dangar, Dar, and Mal.

**Watals.** The Watals have been called the gypsies of Kashmir. They are a peculiar people with a patois of their own. Socially, they may be divided into two classes: those who abstain from eating carrion, and are admitted to the mosques and to the Musalman religion, and those who eat the flesh of dead animals, and are excluded from the mosques. They are a wandering tribe, and though sometimes a family will settle down in a village, and will build a permanent hut, the roving instinct is too strong, and after a few years it would move away.

The principal occupation of the Watals is manufacture of leather. Their habitations, which are usually round wattled huts, are always at some distance from the cottages of the peasants. There they prepare the hides of dead cattle and buffaloes and the skins of sheep and goats, and rear poultry for sale. The Watal women are fine and handsome, and often drift into the city, where they follow the profession of singing and dancing.

**Nangars.** Besides the tribes already described, there are the menials of the village who are outside the pale of the peasant society. They are known by the name 'Nangar'. In a large village we find them working as carpenters, blacksmiths, potters, weavers, butchers, washermen, barbers, tailors, bakers, goldsmiths, carriers, oil-pressers, dyers, milkmen, cotton-cleaners and snuff-makers, and receiving either a fixed share of the harvest or cash payment. They have no hereditary land of their own except for the garden plots adjoining their houses.

**Gujars.** The Gujars belong to the semi-nomad tribe which grazes buffaloes and goats along the mountain fringe of the Valley. They build flat-topped houses for themselves and their cattle.

Their language, known as Parimu or Hindki, is wholly different from the Kashmiri language, and they rarely intermix with the Kashmiris, though, like them, they are Musalmans by religion. They are a fine tall race of men, with rather expressionless faces and large prominent teeth. Their one thought is the upkeep of the cattle, and when they take to cultivation they grow maize rather for the animals than for themselves. They are a simple, in-offensive and generous people. Their credulity is proverbial. Their women keep the accounts of the butter made over to the middleman by tying knots on a string. The favourite name among them is Muhammad, and a man of position among the herdsmen is always addressed as *Bhai* (brother).

## FARMING COMMUNITIES

### INHABITANTS OF NORTH-EAST MOUNTAINS

The communities inhabiting the country on the north-east of the main chain of mountains are Ladakhis, Champas and Baltis. They belong to the Tibetan race. The Ladakhis, who still retain the Buddhist faith to which the Tibetans in the east belong, have settled in small villages in parts of the Indus Valley and the side-valleys. The Champas are a pastoral class, leading a nomadic life in the upland valleys. The Baltis are that branch of the Tibetan race which spread at one time far into the Indus Valley and got converted to the Muslim faith.

**Ladakhis.** The Ladakhis have a Turanian cast of features which is often considered a patent of the Chinese. The cheek bones are high with the face tapering rapidly downwards. The chin is small and retreating. The eyes, brown in colour, are drawn out at the outer corners, and the upper eyelids are overhung by a conspicuous fold of the skin above. The nose is pressed, so to say, into the face and it is often depressed at the bridge. The mouth is large and inexpressive; the lips project but are not thick. The hair, which is black, is cut quite close in front and at the sides of the head; behind, it is collected into a plait or pigtail, which descends to the small of the back. Moustaches are almost always present, but they are small; the beard is very irregular and scanty. In stature the Ladakhis are short; the men measure about 5 feet 2 inches and the women 4 feet 10 inches. Both sexes are broad-made and strong. They are not a handsome race their best friends cannot deny that. As to the women, the best that can be said of their looks is that some of the younger ones are 'not so bad looking.'

The Ladakhis are a cheerful and good-tempered people, always ready for a laugh and a cup of *chang*, their home brewed liquor. And when drunk, they get to wrangling or fighting they forget about it afterwards.

Almost the entire population of Ladakh is Buddhist. It is divided into two sects called the Red Hats and the Yellow Hats, the former being the more orthodox and conservative of the two. On entering Ladakh one is struck by the number of its massive monasteries and heavily robed monks. Almost every family has a member wearing either the Lama's Red Cap or the dress of a *chomo* or nun. The pious Ladakhi keeps turning his prayer wheel and gazing in reverence at the monasteries which house hundreds of lamas.

Every monastery has agricultural land attached to it, and the produce together with the grain collected from the people at the harvest time is the chief means for its maintenance.

Despite their large numbers, the lamas command respect and are accepted as the religious preceptors of the people. The manifold functions of a lama as described by Major Gompertz in his book *Magic Ladakh* are as follows:

"He learns to read and write....He learns to patter charms and to intone the Buddhist scriptures—the Tengyur and Kangyur—one of one

hundred and eight large volumes, the other of, so far as I remember, sixty-three tomes.

"He learns the ritual of the services. . . . He learns also to play the religious instruments—the big warming pan-shaped drums, the little clarionets, the great telescopic brass and copper trumpets, six or seven or eight feet long. He learns also to spin the 'dorjes', the thunder-bolt symbols, of Lamaism—which are the main mark of the Lama; learns also to play the little double-sided drums, which are turned in the hand and so beaten by a small weight on a string as they twist backwards and forwards—little double drums, of which the best are made from the brainpans of two human skulls, and like the 'dorjes' are mighty weapons against demons.

"He is taught also how to make the ceremonial offerings of *chang* (a Ladakhi liquor) and barley, to build the pyramids of butter and parched grain which are piled up on festival days, learns too the charms against evil spirits which will for so much of his work later on when he goes out among the laity.

"And you meet him sometimes in company with an old lama—going out to celebrate a marriage or a funeral—bearing the little brass shrined images or the tomes of the scriptures, acting in fact as acolyte, and so learning the practical side of the business.

"Then, for such as show aptitude, there are arts and crafts to be learned—the printing of the scriptures by the use of wooden and metal blocks, the fashioning of images in metal or wood or plaster, the painting of the wall frescoes, without which no monastery would be complete.

"Again, there are horoscopes to be learned, the manner of selecting auspicious day for weddings, the selection of names for children, the choice of methods of disposing of the dead—an important business upon which may depend the hereafter of the departed spirit."

The Ladakhis are polyandrous. If the eldest son gets married, his wife becomes the legitimate wife of the younger brothers also. The children thus have an 'elder father' and also one or more 'younger fathers'. This system has served the Ladakhis well, exercising a natural check on the increase of population. The monks, both men and women, remain unmarried, though marriage is not expressly forbidden to them.

The only caste-division among the Ladakhis is that which divides the blacksmiths and the musicians (castes which are considered low and are called *Bem*) from the others. The priesthood does not constitute a caste; the office of the lama is not hereditary.

Their dress is simple; it is all woollen, of a coarse and thick home-made cloth. The men wear a *choga*, or wide and long coat, folded over double in front, and confined at the waist by a woollen *kamarband* or scarf. They wear nothing beneath this; with boots and cap, and may be an extra wrapper, their attire is complete. To the Ladakhi his boots are a matter of great importance. The stony ground, and in winter the biting snow, require



FIG. 103. Lamas of Ladakh



FIG. 104. A group of Ladakhi women



FIG. 105. Masked dancers of Ladakh

precautions. A piece of thick leather makes the sole, and is moulded round for the sides of the feet as well. The leg is further protected by felt gaiters, secured by a tape wound many times round. This chaussure is good against cold, and is not bad for climbing the steep hills where the ground is dry.

The women wear a striped gown with the skirt gathered into plaits. Over the shoulders is worn a shawl of sheep-skin, with the wool inside. For head-dress they have only a strip of cloth, ornamented with shells or rough turquoises and edged with fur. They wear the same sort of shoes as the men. The dress of neither men nor women varies with the season of the year.

**Champas.** The Champas are not very different from the Ladakhis. In their features they present minor differences, but the general physiognomy is the same. They are a most hardy and cheerful set of people. Living all their lives in a severely cold climate, and getting a scanty subsistence, they still have the best of spirits. When, after a day's journey, they collect round the scanty fire that is warming their evening meal, their merry laughter shows what a good heart they can keep in what, to strangers, seem to be the hardest of circumstances. Their lives are spent in tents; they stay for a month or two at a time in one spot, to graze their flocks and herds, and then they move with them wherever the advancing season promises better pasture.

The dress of the Champas is almost the same as that of the Ladakhis; only, some of them wear a long wide coat made of lamb-skin instead of woollen cloth.

As a rule, the Champas and Ladakhis do not inter-marry. The religion of the two is the same but it lies light on the Champas. Their youngmen do not become lamas.

**Baltis.** The Baltis are Mohammedanised Tibetans. They are quite of the same stock as the Ladakhis. However, traces of Turanian physiognomy are conspicuous in their features. The high cheek-bones are generally noticeable as also the eyes drawn out at the corners. Their eyebrows are often brought near each other with a wrinkling of the brow. The nose is not so depressed as it is in the case of the Bhots, the Buddhist Tibetans; nor are they quite so scantily bearded.

The Baltis have discarded the pigtail and partly follow the Mohammedan customs of shaving the head; only they leave long side-locks growing from behind the temples, which are sometimes lank, sometimes thick and curly, and sometimes plaited. In stature they are less thick-set than most Ladakhis, and taller too. This difference may be the effect of local circumstances, for in most parts of Baltistan the climate is less severe than that of Ladakh and the life led is somewhat comparatively easier.

In disposition the Baltis are good natured and patient. They are not so cheerful as the Bhots, but they are not lacking in humour. In adopting

Islam, the Baltis dropped the custom of polyandry, and have since followed polygamy. This has resulted in a rather fast increase in the population, which is now much in excess of what the land can support. Many Baltis are, therefore, compelled to leave their country and to seek livelihood in other States. It is estimated that about a thousand men go abroad each year to work, but this is not enough, and the result is that whereas the coolies of Ladakh have clothes to wear, the peasants of Baltistan are comparatively poorer, thinner, and more scantily clad.

The dress of the Baltis is different from that of the Bhots, but it is made of the same material. Instead of the large loose coat, they wear one reaching a little below the knee; they also wear short pyjamas. They also carry one or two wrappers for their waist and shoulders. For the head they have a small round cap. The headmen use a woollen *pagri* or turban over the cap. The people go barefoot a good deal, but they carry with them, for wear in the colder parts, boots of soft leather (often of goat-skin) with the hair intact inside.

#### LANGUAGES AND DIALECTS

The inhabitants of Jammu Province on the left of the river Chenab use mainly the Dogri language, though many of them speak Punjabi also. The people of Mirpur, Poonch, Rajouri, Muzaffarabad, Ramban, Bhadarwah, and Kishtwar belong to the Pahari-speaking groups. Chibhali is common all along the western mountainous region. The people inhabiting the frontier *Illaga* of Ladakh and Baltistan speak Tibetan dialects. In Astor, Gurez, Dras, and Gilgit, the Dard language-group prevails. The main languages or dialects are as many as thirteen. It is possible to make a greater number of sub-divisions, since the speech is apt to vary in these mountain territories within very short distances, but the greater the number of sub-divisions one makes the less sharp becomes the dividing line.

The dialects may be classed in 5 different groups as follows:

##### *Aryan*

- |             |   |
|-------------|---|
| 1. Dogri    |   |
| Chibhali    |   |
| 2. Pahari   | Rambani, Bhadarwahi, Padari, dialect of Doda, and Kishtwari.          |
| 3. Kashmiri |   |
| 4. Dard     | Dialect of Dah, dialect of Astor, Gurez, and Dras, dialect of Gilgit. |

##### *Turanian*

- |            |  |
|------------|--|
| 5. Tibetan | Language of Baltistan and Ladakh, language of the Champas. |
|------------|--|

**Dogri.** The Dogri is spoken in the outer Hills and in the strip of plain at their foot from the Ravi to a little west of the Chenab. It is spoken purest by those who have not mingled much with other races: especially it is to be heard pure and unmixed from the mouths of the women, who due to their seclusion have preserved the indigenous speech. In Jammu town, one hears a mixture of Dogri, Punjabi and Hindustani. It shows greater kinship to Punjabi than to Hindustani, though in some points it bears greater resemblance to the latter than to the former.

**Chibhali.** The Chibhali dialect differs from the Dogri in the same degree as the latter does from the Punjabi. It is only when a person hears these two languages spoken that he becomes aware of the difference.

Chibhali is closely allied to that form of Punjabi which is generally called the Pothwar or Western Punjabi. The change from Dogri to Chibhali in the hills corresponds to that from Punjabi to Western Punjabi in the plains, but there is less difference between Chibhali and Western Punjabi than there is between Dogri and Punjabi.

**Pahari Dialects.** These are met with in the Middle Mountain region and are allied in different degrees to Kashmiri, though the latter can always be distinguished from these. These dialects are: Rambani, Bhadarwahi, Padari, the dialect of Doda and Kishtwari. They represent a gradual passage from Dogri to Kashmiri and may, therefore, be aptly regarded as intermediate dialects. Rambani may be taken as the half-way stage between Dogri and Kashmiri, while Bhadarwahi, Padari, Doda and Kishtwari show marked advances from that stage towards the Kashmiri.

**Kashmiri Dialect.** It is the chief language of the people inhabiting the Kashmir Valley proper. Though it has been the mother-tongue of more than half the population, for centuries, it has never enjoyed the position of a common literary medium or the official language. It has all along remained a vernacular—the medium of intercourse among the common people—while Sanskrit, Prakrit, Persian, and English have been the court languages in different periods of history. But though languishing in comparative neglect, it has grown in its own way, absorbing the vocabulary of other languages and becoming a polyglot. Out of every 100 words of Kashmiri, nearly 25 are of Sanskrit extraction, 40 of Persian, 15 of Hindustani and 10 of Arabic. The remaining 10 are Tibetan, Turki, Dogri, and Punjabi. The language has a grammar of its own which appears to be allied to Sanskrit grammar. It is, however, highly inflectional, and offers not only forms of re-duplication, but also admits of changes within the root.

**Dard Dialects.** The most important of the Dard dialects are those of Astor, Gilgit and Dah. The Astor dialect includes or coincides with the speech of Dard and of Gurez. The Dah dialect is confined to the Buddhist Dards, who on account of their early separation from other Dard communities have preserved their own ancient language. The dialect in use in Gilgit is also different from other Dard dialects.

**Tibetan Dialects.** Of the varieties of the Tibetan language spoken in the upper valleys of Kashmir, the most important are: (*a*) language of Baltistan and Ladakh and (*b*) language of the Champas. There are local differences within the first sub-division—the Zaskar people speak somewhat differently, and also the people in the neighbourhood of Kargil, from the bulk of the settled Ladakhis.

## CHAPTER XXIX

### VILLAGES AND FARMERS' HOUSES

THE Kashmiri village is a picture of sylvan beauty and peace. Set amid hills and woods the cultivators' cottages peep out modestly through the luxuriant foliage. The poverty and squalor of the habitation are covered by the kindly plane-tree, the walnut, the apple, and the apricot. The sparkling stream nearby, or the languid waters of a lagoon, together with the rich shades of the tessellated fields build up a landscape of the most exquisite charm.

The character of the countryside shows to a careful observer marked differences in different regions of the State. The villages in the Valley are different from those in Jammu, as also from those in Poonch, Dardistan, Baltistan and Ladakh, which in turn differ from one another in many ways. The differences are highly interesting and deserve more than a passing reference. The description which follows will give some idea of the special features of the village organisation in various parts of the country.

#### JAMMU

Jammu is a distinct entity in the State. The climate is tropical, and the houses are built after the fashion of those in the adjoining areas of the Punjab. They have flat roofs, and are so laid out as to provide shelter against the heat of summer. The houses of the well-to-do peasants are usually two or even three storeys high, and are usually built of burnt bricks. Love of ornamentation is also freely indulged in to the extent the owner of a house can afford. The streets are narrow, long, and winding, giving the habitation a slovenly look.

#### POONCH

Poonch is a mountainous country where the hills and the precipices are just magnificent. The valleys are cleft out in such a way that it would seem that the whole area was once a great plateau, the softer stones and soils having been washed away and the granite thrown into rib-like formations over which wave upon wave of dark brown pines and firs rises in an endless continuity. The valleys abound in babbling brooks which run over smooth brown sandstone rocks. Foot tracks lead up from the water to lone farm-houses. Here and there is to be found a wider track which cattle have made or where the loaded mule is led. Flowers grow in profusion, and small fields of corn are to be discovered at odd spots. A village generally comprises a few houses scattered about the farms. Nearby are to be found little round huts, often built of straw, housing the mill-stones which grind the corn grown thereabouts. The villages are very clean and well maintained.

## FARMERS OF INDIA

### DARDISTAN

Up to the 13,500 feet high Burzil Pass the country is well-wooded and reasonably fertile. But beyond that it is arid and bare, with high precipitous mountains and rough rock wastes stretching in all directions.

Gilgit is the most important place in Dardistan, and the Gilgit Valley is also the most fertile in the area. Wherever water is available, fruit, wheat, barley and rice are grown, but where cultivation has not been attempted, the land is barren. Villages in the sense in which they are generally understood are practically non-existent here. The hardships of life being very great, the population tends to group around the townships, and the hamlets built on the mountain sides present the appearance of an amphitheatre. The standard of sanitation is very low, and the habitations look like dirty patches on the clean wastes.

### BALTISTAN

Baltistan extends for about 150 miles along either side of the river Indus on the northern border of Kashmir. It is indeed a strange land, for in some places glaciers are found while in others near the white marble rocks there are hot springs which record a temperature of 108°F. Set among very high mountains, through which there are only a few passes, the country has little in common with modern world.

Here and there, where a mountain stream flows, the Baltis have made full use of it, diverting it into their small plots of land. In this they show amazing ingenuity and sometimes the water channels run for miles before reaching the fields. Nearabout the farms are found small groups of flat-roofed houses, built of logs and covered with mud and sheltered by walnut or apricot trees. The village, if not dominated by a fortress or a chief's house, has as its principle building a mosque. This is usually built after the style of the Shah-i-Hamadan Mosque in Srinagar, and serves as the meeting place for the villagers. Above Shigar, the Valley is comparatively more fertile. There are to be found orchards of pear, walnut, apple and apricot, and fields which yield good crop of hay, buck-wheat, barley, beans and turnips. The bushes are red with berries in winter. The people dry the apricots and walnuts in the sun, and this forms the principal export from the province.

### THE VALLEY

Inside the girdle of the mountains lies the Valley of Kashmir. Here, doubled up among the hills or nestling comfortably in the wooded vales are to be seen farms, granges and small hamlets. There is no crowding of houses; most cottages are fenced off from one another and have their own small kitchen gardens. Here and there one spots young women pounding rice. The children, if not tending the cattle, romp about in the streets. At some remove from the habitation is usually a stream or a lakelet where at all hours one may see some villager leisurely washing himself.



FIG. 106. Houses in a Jammu village



FIG. 107. A typical village of the Valley



FIG. 108. Multi-storeyed houses in a prosperous village



FIG. 109. A Hindu farmer's house

## VILLAGES AND FARMERS' HOUSES

The description of village houses given by Lawrence in *The Valley of Kashmir* still holds true and is, therefore, reproduced below:

"The houses are made of unburnt bricks set in wooden frames, and of timber of cedar, pine and fir, the roofs being pointed to throw off snow. In the loft formed by the roof, wood and grass are stored and the ends are left open to allow these to be thrown out when fire occurs. The thatch is usually of straw. Rice straw is considered to be the best material, but in the vicinity of the lakes reeds are used. Near the forests the roofs are made of wooden shingles, and the houses are real log huts, the walls being formed of whole logs laid one upon another, like the cottages of the Russian peasantry. Further away from the forests the walls are of axe-cut planks fitted into grooved beams. Outside the first floor of the house is a balcony approached by a ladder, where the Kashmiri delights to sit in the summer weather. Later the balcony and the loft are festooned with ropes of dry turnips, apples, maize-cobs for seed, vegetable marrows and chillies, for winter use. Sometimes in the villages one finds the roofs of the larger houses and of the shrines (*ziarats*) made of birch bark with a layer of earth above it. This forms an excellent roof, and in the spring the housetops are covered with iris, purple, white and yellow, with the red Turk's head and the Crown Imperial lilies. . . .

"On the ground floor the sheep and cattle are penned, and sometimes the sheep are crowded into a wooden locker known as the *dangis*, where the children sit in the winter. . . .

"The furniture of a Kashmiri house may be described briefly. There is none. In the villages and city alike, the people sleep on mats and straw, bedsteads being unknown. A cotton-spinning wheel, a wooden pestle and mortar for husking rice, a few earthen vessels for cooking, and earthen jars for storing grain, complete the interior of a Kashmiri house. The useful *kilta* is found in all. This is a large creel, which the Kashmiri straps on his back, and in which heavy loads are carried. The *kilta* is usually made of the withies of willow, Cotoneaster or Parrotia."

## LADAKH

Ladakh, or 'Little Tibet' as it is often called, is virtually a Shangrila. Locked in by mountains rising to 25,000 feet, this 30,000 square mile valley of the lamas and monasteries defies both time and change.

It takes about an hour to fly from Srinagar to Leh, the capital of the Province; it takes sometimes weeks and even months to reach there on foot by the old caravan routes through the passes which are closed for half the year. No wonder few Ladakhis venture from their country, and when they do, have soon to return being unable to live in the denser air of the lower countries. The land has remained till very recent times almost sealed to the outside world. It, therefore, knows no crime.

Ladakh is a country of extremes and contrasts. Its climate is of a severe kind—very hot in summer and intensely dry and cold in winter. Piercing winds blow in autumn. Rainfall is scanty, and so is vegetation. But the ibex, the snow leopard, the Tibetan antelope and the goat thrive.

A couple of houses go to make a Ladakhi village. These are perched on the steep hillsides which would seem impossible to climb. The fields grow barley, wheat, buck-wheat, peas, beans and rapeseed. The fruit trees bear apricot, apple and mulberry. The land is ploughed with an animal called *zho*, an ever-grunting beast, which is a cross between a yak and a cow. Irrigation is done by means of small canals. But despite hard struggle, the Ladakhi peasant wrests only a small reward from niggardly Nature. This, however, does not prevent him from being always cheerful.

Women work along with their men-folk in the fields, and at the time of ploughing or harvesting the whole family gets busy. During breaks, they gather together for tea or for meals. The strain of the labour is lightened by songs and dances. The evenings are brightened by the *chang*, the local brew prepared from *grim*, a kind of barley.

## CHAPTER XXX

### FOLKLORE

Nor so much its geographical isolation as the close adherence of its natives to tradition and custom has helped Kashmir to preserve its cultural integrity through the upheavals of history. Its old folk-tales, legends and myths are still alive and fresh; the traditional music, songs and dances of the peasantry continue to echo through the countryside, and the village bards still conjure up the past in all its vividness and glory. It was the ancient folklore from which Kalhana the author of 'Rajatarangini' constructed a continuous history of the land from the earliest times. It is the self-same folklore to which a modern student of humanities must repair if he seeks a living contact with Kashmir.

In the folk-songs of the Kashmiris ring stories of love, stories of heroes, and many tales of the legendary age. Then there are songs for each of the seasons—for the sowings, the harvest, the collection of saffron, etc.—as also for weddings, births and other social events. Whatever the theme, it is spun into a ditty of exquisite beauty.

The lonely maiden tired of waiting for her swain would pour out her heart in touching rhymes:

Towards Pampur went away my darling,  
Saffron flowers caught him in fragrant embrace.  
O, he is there and ah me! I'm here!  
When, where, O God, would I see his face?

Or on the wedding night the beauty of the bride would prompt an old folk-song:

Our bride is robed in muslin,  
Oh maid! who has dressed you?  
Your beautiful eyes are crystal-clear,  
Oh maid! who has dressed you?  
Your teeth are so many pearls,  
Who has delayed them from the sea?  
You are a dealer in gems,  
Oh maid! who has dressed you?  
Walking, you dispel darkness like a torch,  
You twitter like a *koel*,  
Your love has soothed even depressed souls,  
Oh maid! who has dressed you?

When Id is approaching and Ramzan is about to end, or at the harvest time, the country lasses come out on moonlit nights and sing and dance for hours. They show a remarkable ease in weaving rhymes. There is a

nursery-rhyme freshness, a certain Hickery-Dickery-Dock rhythm in their songs, which beautifully harmonizes with their lusty spirits and youth.

The Kashmiri folk-song is a blend of highly charged emotions. If we were to describe it in one word, we might call it *lol*, a Kashmiri word signifying an untranslatable complex of love, longing and a tugging at the heart, "a longingness—'poor mortal longingness'" in Walter de La Mare's phrase.

In the spring season when the flowers are in bloom, the young maiden waiting for her absent lover bursts out as follows:

Flowers have blossomed in all their hues,  
Love, where are you?  
The rose has come, graceful and lovely,  
The tuberose, the balsam, and the *Sonaposh* have bloomed,  
The Larkspur and the hyacinth burst daintily into bloom,  
Love, where are you?

But he does not come; and the yearning deepens, and so deepens the anguish of separation:

The distant meadows are in bloom,  
Hast thou not heard my plaint?  
Flowers bloom on mountain lakes,  
Come, let us to mountain meads;  
The lilac blooms in distant woods,  
Hast thou not heard my plaint?

Then comes the questioning and doubting of Love's fidelity. Even patience has a limit, and she begins to accuse him, the reckless, the inconstant, 'the visitor of a hundred homes, the luxury-mad, the voluptuary':

Over passes high I carried him wine,  
But he is roaming 'mid sylvan glades.  
O why does he dwell in the distant glades?  
O where is he drunk with my rivals' wine?

There are other moods also but the tone is usually the same: plaintive, wistful, melancholy. These songs have relieved the tedium of the life of Kashmiri women for centuries, who find in them a sincere echo of their own emotions.

#### FOLK-DANCES

As elsewhere in India, dancing in Kashmir had its origin in religion and religious practices. The temple dancers played an important role in its development. It appears from some passages in the *Rajatarangini* that dancing in the temples was a hereditary profession in some families. This tradition did not die with the advent of Islam, as the cult of *Sufism* which had ascendancy over the more orthodox Muslim faiths tolerated dancing and music as aids to God realization. This led to the synthesis of Indian and Persian forms of dancing into new styles.

**Hafiza Dance.** Hafiza, an important dance of the Valley, shows marked traits of Sufi influence. Till 1920, the Hafiza dancing girls were greatly in demand during weddings, *melas* and outdoor parties. They belonged to a class of professional dancers. The orchestra accompanying them was invariably of the *sufianakalam*-type *santur*, *saz-i-Kashmir*, *sitar* and *tabla*. They sang Kashmiri and Persian couplets and *ghazals* explaining the meaning with appropriate gestures and movements of hands, feet and eyes.

The dress worn by a Hafiza dancer generally corresponds to that worn by the classical dancers of North India: a tight fitting short blouse and a skirt of enormous width which is worn gathered tightly about the waist. A *dopatta* of diaphanous silk is draped on the head and shoulders, and traditional Kashmiri jewellery, such as, large *kundlas* or ear-rings, *talra*, *balis* and necklaces are worn.

Usually, two Hafiza girls take part in the performance. The dance begins with music, the Hafizas taking up the refrain with suitable movements and gestures. They move in a semi-circle with short steps, gliding effortlessly across the floor. The movements of feet require great agility and long practice, and so do the movements of eyes through which various moods and emotions are expressed.

Hafiza dancing is popular among all classes of people. Usually, public performances are arranged with funds collected from voluntary subscriptions. Many a European traveller to Kashmir has testified to the spotless lives led by the Hafiza dancing girls who are as much devoted to their art as to religious observances. However, this beautiful dance is now on the decline as it has lost the patronage of the aristocracy.

**Bacha Nagma.** This form of dance is an adaptation of the Hafiza style. A boy in his teens is trained in the art under the supervision of an accomplished Hafiza. He is made to wear his hair long and to don a dress similar to that used by Hafiza dancers. Instead of an elaborate and highly skilled orchestra which accompanies the Hafiza, the *shahnai* and an ordinary *dholak* provide the music. The dance is particularly popular during the harvest season.

**Wattal Dumhal.** This is a dance of the wandering tribes of Wattals. It is performed at the time of festivals and *melas*. About 30 to 40 young men put on colourful robes and conical caps studded with trinkets of cowry shells, glass beads, and silver pendants. The performance begins with a slow pacing around the banner of the festival, to the beating of the drum. As the tempo increases, both the drummers and the dancers accelerate their movements, jumping, yelling and making all kinds of vigorous gestures. When the dance reaches its highest pitch, the beating of the drum stops suddenly and the dancers come to an abrupt halt. After a few minutes' rest the performance is repeated, and this continues till the *mela* ends.

**Rouf Dance.** The Rouf is essentially a women's dance. On festivals and during the harvest season, the village green and the river banks resound

to the song and dance of Rouf parties. Two rows of 10 to 15 dancers form a chain by laying their arms across one another's back. Dressed in festal garments and singing a simple and charming song, they move in step backwards and forwards, each party taking up the refrain of the song by turn.

Though not comparable to the Wattal Dumhal, in vigour and enthusiasm, the Rouf dance has a peculiar charm and its haunting tunes linger long after it is over.

**Hikat Dance.** The Hikar is a common dance performed by young country girls and boys in groups. With their hands gripped crossways, each pair of dancers spins round and round with their heads and bodies thrown backwards. No musical instrument accompanies the dance. As the tempo of the performance rises, the spinning becomes faster and faster.

**Bhangra Dance of Jammu.** Jammu has developed a distinct style of dancing. The Bhangra is the most popular of all folk-dances in the region, as its vigorous movements are in keeping with the martial instincts of the Dogras. It is performed only by men on *melas* and festivals to the accompaniment of the beating of *dhols*. The spectators are thrilled by the gusto of the dancers who look as if possessed by a mighty spirit.

**Masked Dances of Ladakh.** Living in a country of gigantic mountains and howling winds, the Ladakhis express their fears of and submission to indomitable Nature through their famous masked dances which are accompanied by their shrilling *shwams* (long copper trumpets) and the resounding drums. These dances invariably depict the victory of good over evil. They are performed at the monasteries and attract large crowds not only from different parts of Ladakh but also from far away places like Lahaul, Kashmir Valley and Jammu.

The dance is performed in the special courtyard of the monastery and continues from the early hours of the morning till late in the evening. It depicts the various stages of the struggle between the good and the evil forces. The actors and musicians are the Lamas.

The dance commences with the blowing of trumpets, cymbals and circular drums. A party of 15 to 20 Lamas in black hats come to the stage and sprinkle holy water from the vessel which they carry under their arms. After this, another party, guised as half human and half demoniac figures, occupy the stage and with their grotesque gestures try to lead astray the human soul from the path of salvation. Exactly at the time when the soul is about to succumb to the forces of evil, a party of dancers dressed in soft-coloured robes and wearing pleasing masks appears on the scene and drives out the demons. As they withdraw, the ghouls enter with skull-shaped masks and long fingers and toes. In appearance they resemble the human skeleton. Their tight fitting garments are ribbed in red to represent the bones. They dance fantastically round the corpse dashing up to it and threatening it with their ghost daggers, dashing away from it with wild shrieks and sweeping in again to dash out once more. Sometimes they are chased by some

## FOLKLORE

saintly figure who utters charms and incantations, but soon they return moving their daggers. Then comes the great stag-headed, blue-faced god of Hell with his sword, and stands over the corpse. He brandishes his sword as if to cut it to pieces. Yet, somehow, he misses it, and is driven out by some benevolent figure. Thereafter, the scene turns comic. An old teacher enters, a fat masked buffoon, who can hardly walk. He is attended by a riotous train of impish school boys in pink masks. He installs himself on the seat and proceeds to teach his flock, who jeer at him as also at his attempts to reach them with his stick. This horse-play continues for a long time and provokes lot of laughter.

# APPENDIX

TABLE 14. Districts and Tehsils of Jammu and Kashmir State before 1947 (including areas now occupied by Pakistan)

Districts					Tehsils	
1.	ANANTNAG	..	..	..	i.	Sherikhas
					ii.	Awantipura
					iii.	Anantnag
					iv.	Kulgam
2.	UDHAMPUR	..	..	..	i.	Ramban
					ii.	Kishtwar
					iii.	Udhampur
					iv.	Bhadrawah
					v.	Ramnagar
3.	KATHUA	..	..	..	i.	Jasmergarh
					ii.	Kathua
					iii.	Basoli
4.	KOTLI	..	..	..	i.	Kotli
					ii.	Mirpur
					iii.	Bhimber
5.	GILGIT	..	..	..	i.	Gilgit
6.	CHILAS	..	..	..	i.	Chilas
7.	JAMMU	..	..	..	i.	Akhnoor
					ii.	Jammu
					iii.	Ranbirsingh Pura
					iv.	Samba
8.	POONCH	..	..	..	i.	Bagh
					ii.	Poonch
					iii.	Sudhnuthi
					iv.	Mandhar
					v.	Thakiala Barawa
9.	BARAMULLA	..	..	..	i.	Uttarmachpura
					ii.	Baramulla
					iii.	Sripratapsinghpur
10.	MUZZUFFARABAD	..	..	..	i.	Karnabad
					ii.	Muzzuffarabad
					iii.	Uri
11.	REASI	..	..	..	i.	Rampur
					ii.	Reasi
12.	LADAKH	..	..	..	i.	Skardu
					ii.	Kargil
					iii.	Leh
13.	GILGIT WAZIRAT	..	..	..	—	

# APPENDIX

TABLE 15. Districts and Tehsils of Jammu and Kashmir State, excluding Areas Occupied by Pakistan

Districts					Tehsils	
KASHMIR PROVINCE						
1.	SRINAGAR	..	..	..	..	i. Khas ii. Badgam iii. Srinagar
2.	BARAMULLA	..	..	..	..	i. Baramulla ii. Sopore iii. Handwara iv. Uri v. Karnah
3.	ANANTNAG	..	..	..	..	i. Anantnag ii. Kulgam iii. Pulwama
4.	LADAKH	..	..	..	..	i. Ladakh ii. Kargil
JAMMU PROVINCE						
1.	JAMMU	..	..	..	..	i. Jammu ii. Samba iii. Akhnoor iv. Ranbirsingh Pura
2.	KATHUA	..	..	..	..	i. Jasmergarh ii. Kathua iii. Basoli
3.	UDHAMPUR	..	..	..	..	i. Udhampur ii. Ramnagar iii. Reasi
4.	DODA	..	..	..	..	i. Doda ii. Kishtwar iii. Bhadarwah iv. Ramban
5.	RAJOURI	..	..	..	..	i. Havali ii. Mondhar iii. Nowhera iv. Rajouri

# APPENDIX

TABLE 16. Area and Population of Districts of Jammu and Kashmir State (1951)

District					Area (sq. miles)	Population
Jammu	..	..	..	..	1,147	403,000
Kathua	..	..	..	..	2,812	165,000
Udhampur	..	..	..	..	5,165	210,000
Rajouri	..	..	..	..	1,706	195,000
Doda	..	..	..	..	3,142	216,000
Jammu Province (Total)	..	..	..	..	13,972	1,189,000
Baramulla	..	..	..	..	3,317	543,000
Anantnag	..	..	..	..	2,071	597,000
Srinagar	..	..	..	..	743	539,000
Kashmir Province (Total)	..	..	..	..	6,131	1,679,000
Frontier District (Ladakh)	..	..	..	..	37,240	80,000
Area under occupation of Pakistan	..	..	..	..	28,518	N.A.
<i>Total</i>	..	..	..	..	85,861	2,948,000*

N.A. = Figures not available.

\* Excluding population in areas occupied by Pakistan.

# APPENDIX

TABLE 17. Classification of Land in Jammu and Kashmir\* (1955-56)

Classification of Land						Area (000 acres)
Geographical area	..	..	..	..	..	54,951
Forests	..	..	..	..	..	1,398
Land put to non-agricultural uses	..	..	..	..	..	763
Barren and unculturable land	..	..	..	..	..	909
Permanent pastures and other grazing lands	..	..	..	..	..	315
Land under miscellaneous tree crops and groves not included in net area sown	..	..	..	..	..	79
Culturable waste	..	..	..	..	..	261
Fallow lands other than current fallows	..	..	..	..	..	293
Current fallows	..	..	..	..	..	372
Net area sown	..	..	..	..	..	1,533
Total cropped area	..	..	..	..	..	1,840
Area sown more than once	..	..	..	..	..	307

\* Figures for area under the occupation of Pakistan not available.

## APPENDIX

TABLE 18. Area under and Production of Food Grains in Jammu and Kashmir\* (1957-58)

District	Paddy		Wheat		Maize	
	Area (acres)	Production (md.)	Area (acres)	Production (md.)	Area (acres)	Production (md.)
Srinagar ..	54,274	10,85,480	20,406	1,22,448	23,619	1,88,952
Anantnag	97,149	19,42,980	25,051	2,00,408	42,021	3,36,168
Baramulla	89,415	17,88,300	19,333	1,54,664	63,442	5,07,536
Ladakh ..	Not grown	Not grown	7,976	63,808	Not grown	Not grown
Kathua ..	26,340	4,21,440	41,008	2,87,056	19,221	1,53,768
Jammu ..	44,989	7,19,824	1,08,654	7,60,578	22,265	1,78,120
Udhampur	15,265	2,44,240	31,156	1,86,936	57,055	4,56,440
Doda ..	8,139	1,30,224	14,943	1,04,601	42,824	3,42,592
Rajouri ..	16,910	2,67,560	34,813	2,43,691	72,630	5,81,040
<i>Total</i> ..	3,52,481	66,00,048	3,03,340	21,24,190	3,43,077	27,44,616

\* Figures for area under occupation of Pakistan not available.

## APPENDIX

TABLE 18. Area under and Production of Food Grains in Jammu and Kashmir\* (1957-58)—(Concluded)

District	Jowar		Buck-wheat		Minor Millets (Cheena and Kangni)	
	Area (acres)	Produc- tion (md.)	Area (acres)	Produc- tion (md.)	Area (acres)	Produc- tion (md.)
Srinagar ..	.. Not grown in Kashmir Province	Not grown in Kashmir Province	176	1,408	504	4,032
Anantnag ..	.. —do.—	—do.—	338	2,704	155	1,240
Baramulla ..	.. —do.—	—do.—	738	5,504	2,706	21,648
Ladakh ..	.. —do.—	—do.—	1,390	9,730	235	1,580
Kathua ..	.. 65	260	..	..	15	105
Jammu ..	.. 880	5,280	..	..	15	105
Udhampur ..	.. 4	16	..	..	174	1,218
Doda ..	.. ..	..	..	..	4,528	35,079
Rajouri ..	.. 1	4	2,642	19,346	14	98
<i>Total</i> ..	.. 950	5,560	5,284	38,692	8,346	65,105

\* Figures for areas under occupation of Pakistan not available.

## APPENDIX

TABLE 19. Area (acres) under Fruits in Jammu and Kashmir\* (1955-56)

District	Mango	Citrus	Bananas	Grapes	Pome fruits	Other fruits	Total fresh fruits
Jammu ..	191	325	..	..	180	..	696
Udhampur ..	58	..	17	1	..	22	98
Doda ..	..	..	..	..	133	..	133
Kathua ..	266	49	18	..	..	39	372
Poonch ..	..	..	..	..	..	2	2
Srinagar ..	..	..	..	23	..	7,449	7,472
Anantnag ..	..	..	..	..	1,683	3,974	5,657
Baramulla ..	..	..	..	..	..	1,523	1,523
Ladakh ..	..	..	..	1	..	172	173
<i>Total</i> ..	515	374	35	25	1,996	13,181	16,126

\* Figures for area under occupation of Pakistan not available.